

PUBLICATIONS 2012



DÉPARTEMENT D'ASTROPHYSIQUE, GÉOPHYSIQUE ET OCÉANOGRAPHIE

Université de Liège

Allée du 6 août, 17 (B5c)
4000 Liège (BELGIUM)

Tél : 32 – 4 – 366 97 74
Fax : 32 – 4 – 366 97 29

ASTROPHYSICS AND IMAGE PROCESSING

- **MAGAIN P.**
- CHANTRY V.
- DECOCK A.
- DELREZ L.
- EULAERS E
- FUMEL A.
- GILLON M.
- JEHIN E.
- LANOTTE A.
- OPITOM C.
- SOHY S.

ATMOSPHERIC AND PLANETARY PHYSICS

- **GRODENT D.**
- BONFOND B.
- COUMANS V.
- DUMONT M.
- GERARD J. -C.
- GUSTIN J.
- HEYLENS B.
- HUBERT B.
- MOUCHET A.
- MUNHOVEN G.
- RADIOTI A.
- SORET L.
- STIEPEN A.

ATMOSPHERIC AND SOLAR SPECTROSCOPY

- **MAHIEU E.**
- BADER W.
- BOVY B.
- DEMOULIN Ph.
- LEJEUNE B.
- ROLAND G.
- SERVAIS Ch.
- ZANDER R.

CHEMICAL OCEANOGRAPHY

- **BORGES A.**
- BEULEN A.
- CHAMPENOIS W.
- COMMARIEU M. -V.
- DARCHAMBEAU F.
- DELILLE B.
- HARLAY J.
- HOORNAERT S.
- ROLAND F.

CLIMATE AND BIOGEOCHEMICAL CYCLES MODELING UNIT

- **FRANCOIS L.**
- DURY M.
- JACQUEMIN I.
- MAHAMAT NOUR M.
- VIOLETTE A.
- OUBERDOUS M.

EXTRAGALACTIC ASTROPHYSICS AND SPACE OBSERVATIONS

- **SURDEJ J.**
- ABSIL O.
- **AKHUNOV T.**
- ARPIGNY C.
- BRAIBANT L.
- KUMAR B.
- DAMERDJI Y.
- DELCHAMBRE L.
- DEVOGELE M.
- FINET F.
- HANOT C.
- HUTSEMEKERS D.
- ELYIV A.
- MELNYK O.
- POELS J.
- POSPIESZALSKA A.
- RENSON P.
- RICCI D.
- WERTZ O.

FUNDAMENTAL INTERACTIONS IN PHYSICS AND ASTROPHYSICS

- **CUDELL J.-R.**
- ARISTIZABAL D.
- COURTOY A.
- CUGNON J.
- DEGEE A.
- DE ROP Y.
- EBRAHIMI V.
- IVANOV I.
- MELI A.
- PAYEZ A.
- PELGRIMS V.
- STANCU F.
- STASSART P.
- WALLEMACQ Q.

HIGH ENERGY ASTROPHYSICS

- **RAUW G.**
- DE BECKER M.
- GOSSET E.
- HERVE A.
- MAHY L.
- MANFROID J.
- MERNIER F.
- MOREL T.
- NAZÉ Y.
- PALATE M.
- SWINGS J. -P.
- VAMVATIRA-NAKOU C.
- VREUX J. -M.

HOLOLAB

- **HABRAKEN S**
- BLAIN P.
- DECULTOT M.
- DELACROIX C.
- DESFOURS C.
- HORUGAVYE G.
- LANGUY F.
- MARTIN G.
- PIRON P.

PHYSICAL OCEANOGRAPHY AND INTERDISCIPLINARY MODELING OF MARINE SYSTEMS

- **BECKERS J.-M.**
- ALVERA-AZCÁRATE A.
- BARTH A.
- BELOUNIS M.
- CANTER M.
- CAPET A.
- DJENIDI S.
- HUYNH N.
- LAENEN F.
- NIHOUL J.
- OUBERDOUS M.
- RONDAY F.
- TOMAZIC I.
- TROUPIN Ch.
- YAN Y.

THEORETICAL STELLAR ASTROPHYSICS AND ASTEROSEISMOLOGY

- **DUPRET M-A.**
- BOUABID M.
- BRIQUET M.
- GABRIEL M.
- GODART M.
- GREVESSE N.
- GROSJEAN M.
- MONTALBAN J.
- NOELS A.
- OUAZZANI R.-M.
- OZEL N.
- REESE D.
- SALMON S.
- SCUFLAIRE R.
- THOUL A.
- VALENTINI M.
- VAN GROOTEL V.

THERMODYNAMICS OF IRREVERSIBLE PHENOMENA

- **DAUBY P.C.**
- CHASE G.
- COLLET A.
- DESAIVE Th.
- KOSTA S.
- LEBON G.
- MACHRAFI H.
- PAEME S.
- PENNING S.
- PIRONNET A.
- PRETTY Ch.

Astrophysics and Image Processing

Anderson, D. R, Collier Cameron, A, **Gillon, M**, Hellier, C, **Jehin, E**, Lendl, M, Maxted, P. F. L, Queloz, D, Smalley, B, Smith, A. M. S, Triaud, A. H. M. J, West, R. G, Pepe, F, Pollacco, D, Ségransan, D, Todd, I, & Udry, S. (2012). WASP-44b, WASP-45b and WASP-46b: three short-period, transiting extrasolar planets. *Monthly Notices of the Royal Astronomical Society*, **422**(3), 1988. <http://hdl.handle.net/2268/95419>

Bonfils, X, **Gillon, M**, Udry, S, Armstrong, D, Bouchy, F, Delfosse, X, Forveille, T, **Fumel, A, Jehin, E**, Lendl, M, Lovis, C, Mayor, M, McCormac, J, Neves, V, Pepe, F, Perrier, C, Pollaco, D, Queloz, D, & Santos, N. C. (2012). A hot Uranus transiting the nearby M dwarf GJ 3470. Detected with HARPS velocimetry. Captured in transit with TRAPPIST photometry. *Astronomy and Astrophysics*, **546**, 27. <http://hdl.handle.net/2268/135085>

Brown, D. J. A, Cameron, A. C, Anderson, D. R, Enoch, B, Hellier, C, Maxted, P. F. L, Miller, G. R. M, Pollacco, D, Queloz, D, Simpson, E, Smalley, B, Triaud, A. H. M. J, Boisse, I, Bouchy, F, **Gillon, M**, & Hébrard, G. (2012). Rossiter-McLaughlin effect measurements for WASP-16, WASP-25 and WASP-31★ *Monthly Notices of the Royal Astronomical Society*, 2920. <http://hdl.handle.net/2268/120906>

Brown, D. J. A, Collier Cameron, A, Díaz, R. F, Doyle, A. P, **Gillon, M**, Lendl, M, Smalley, B, Triaud, A. H. M. J, Anderson, D. R, Enoch, B, Hellier, C, Maxted, P. F. L, Miller, G. R. M, Pollacco, D, Queloz, D, Boisse, I, & Hébrard, G. (2012). Analysis of Spin-Orbit Alignment in the WASP-32, WASP-38, and HAT-P-27/WASP-40 Systems. *Astrophysical Journal*, **760**, 139. <http://hdl.handle.net/2268/142196>

Carone, L, Gandolfi, D, Cabrera, J, Hatzes, A. P, Deeg, H. J, Csizmadia, S, Paetzold, M, Weingrill, J, Aigrain, S, Alonso, R, Alapini, A, Almenara, J.-M, Auvergne, M, Baglin, A, Barge, P, Bonomo, A. S, Bordé, P, Bouchy, F, Bruntt, H, Carpano, S, Cochran, W. D, Deleuil, M, Díaz, R. F, Dreizler, S, Dvorak, R, Eisloffel, J, Eigmüller, P, Endl, M, Erikson, A, Ferraz-Mello, S, Fridlund, M, Gazzano, J.-C, Gibson, N, **Gillon, M**, Gondoin, P, Grziwa, S, Guenther, E. W, Guillot, T, Hartmann, M, Havel, M, Hébrard, G, Jorda, L, Kabath, P, Léger, A, Llebaria, A, Lammer, H, Lovis, C, MacQueen, P. J, Mayor, M, Mazeh, T, Moutou, C, Nortmann, L, Ofir, A, Ollivier, M, Parviainen, H, Pepe, F, Pont, F, Queloz, D, Rabus, M, Rauer, H, Régulo, C, Renner, S, de la Reza, R, Rouan, D, Santerne, A, Samuel, B, Schneider, J, Shporer, A, Stecklum, B, Tal-Or, L, Tingley, B, Udry, S, & Wuchterl, G. (2012). Planetary transit candidates in the CoRoT LRA01 field. *Astronomy and Astrophysics*, **538**, 112. <http://hdl.handle.net/2268/102255>

Carry, B, Vernazza, P, Dumas, C, Merline, W. J, Mousis, O, Rousselot, P, **Jehin, E**, Manfroid, J, Fulchignoni, M, & Zucconi, J.-M. (2012). The remarkable surface homogeneity of the Dawn mission target (1) Ceres. *Icarus*, **217**, 20-26. <http://hdl.handle.net/2268/107598>

Cavarroc, C, Moutou, C, Gandolfi, D, Tingley, B, Ollivier, M, Aigrain, S, Alonso, R, Almenara, J.-M, Auvergne, M, Baglin, A, Barge, P, Bonomo, A. S, Bordé, P, Bouchy, F, Cabrera, J, Carpano, S, Carone, L, Cochran, W. D, Csizmadia, S, Deeg, H. J, Deleuil, M, Díaz, R. F, Dvorak, R, Endl, M, Erikson, A, Fridlund, M, **Gillon, M**, Guenther, E. W, Guillot, T, Hatzes, A, Hébrard, G, Jorda, L, Léger, A, Lammer, H, Lev, T.-O, Lovis, C, MacQueen, P. J, Mazeh, T, Ofir, A, Parviainen, H, Pasternacki, T, Pätzold, M, Queloz, D, Rauer, H, Rouan, D, Samuel, B, Santerne, A, Schneider, J, Weingrill, J, & Wuchterl, G. (2012). Transiting exoplanets from the CoRoT space mission Resolving the nature of transit candidates for the LRA03 and SRa03 fields. *Astrophysics & Space Science*, **337**, 511-529. <http://hdl.handle.net/2268/114055>

de Wit, J, **Gillon, M**, Demory, B.-O, & Seager, S. (2012). Secondary eclipse scanning of HD189733b: The perspectives of mapping distant worlds. *Astronomy and Astrophysics*, **548**, 128. <http://hdl.handle.net/2268/114057>

Deleuil, M, Bonomo, A. S, Ferraz-Mello, S, Erikson, A, Bouchy, F, Havel, M, Aigrain, S, Almenara, J.-M, Alonso, R, Auvergne, M, Baglin, A, Barge, P, Bordé, P, Bruntt, H, Cabrera, J, Carpano, S, Cavarroc, C, Csizmadia, S, Damiani, C, Deeg, H. J, Dvorak, R, Fridlund, M, Hébrard, G, Gandolfi, D, **Gillon, M**, Guenther, E, Guillot, T, Hatzes, A, Jorda, L, Léger, A, Lammer, H, Mazeh, T, Moutou, C, Ollivier, M, Ofir, A, Parviainen, H, Queloz, D, Rauer, H, Rodríguez, A, Rouan, D, Santerne, A, Schneider, J, Tal-Or, L, Tingley, B, Weingrill, J, & Wuchterl, G. (2012). XX. CoRoT-20b: A very high density, high eccentricity transiting giant planet. *Astronomy and Astrophysics*, **538**, 145. <http://hdl.handle.net/2268/102252>

Demory, B.-O, **Gillon, M**, Seager, S, Benneke, B, Deming, D, & Jackson, B. (2012). Detection of Thermal Emission from a Super-Earth [letter to the editor]. *Astrophysical Journal Letters*, **751**(2), 28. <http://hdl.handle.net/2268/120925>

Erikson, A, Santerne, A, Renner, S, Barge, P, Aigrain, S, Alapini, A, Almenara, J.-M, Alonso, R, Auvergne, M, Baglin, A, Benz, W, Bonomo, A. S, Bordé, P, Bouchy, F, Bruntt, H, Cabrera, J, Carone, L, Carpano, S, Csizmadia, S, Deleuil, M, Deeg, H. J, Díaz, R. F, Dvorak, R, Ferraz-Mello, S, Fridlund, M, Gandolfi, D, Gazzano, J.-C, **Gillon, M**, Guenther, E. W, Guillot, T, Hatzes, A, Hébrard, G, Jorda, L, Lammer, H, Léger, A, Llebaria, A, Mayor, M, Mazeh, T, Moutou, C, Ollivier, M, Ofir, A, Pätzold, M, Pepe, F, Pont, F, Queloz, D, Rabus, M, Rauer, H, Régulo, C, Rouan, D, Samuel, B, Schneider, J, Shporer, A, Tingley, B, Udry, S, & Wuchterl, G. (2012). Planetary transit candidates in the CoRoT-SRc01 field. *Astronomy and Astrophysics*, **539**, 14. <http://hdl.handle.net/2268/114054>

Gillon, M, Demory, B.-O, Benneke, B, Valencia, D, Deming, D, Seager, S, Lovis, C, Mayor, M, Pepe, F, Queloz, D, Segransan, D, & Udry, S. (2012). Improved precision on the radius of the nearby super-Earth 55 Cnc e. *Astronomy and Astrophysics*, **539**, 28. <http://hdl.handle.net/2268/102248>

Guenther, E. W, Diaz, R. F, Gazzano, J.-C, Mazeh, T, Rouan, D, Gibson, N, Csizmadia, S, Aigrain, S, Alonso, R, Almenara, J. M, Auvergne, M, Baglin, A, Barge, P, Bonomo, A. S, Borde, P, Bouchy, F, Bruntt, H, Cabrera, J, Carone, L, Carpano, S, Cavarroc, C, Deeg, H. J, Deleuil, M, Dreizler, S, Dvorak, R, Erikson, A, Ferraz-Mello, S, Fridlund, M, Gandolfi, D, **Gillon, M**, Guillot, T, Hatzes, A, Havel, M, Hebrard, G, **Jehin, E**, Jorda, L, Lammer, H, Leger, A, Moutou, C, Nortmann, L, Ollivier, M, Ofir, A, Pasternacki, T, Paetzold, M, Parviainen, H, Queloz, D, Rauer, H, Samuel, B, Santerne, A, Schneider, J, Tal-Or, L, Tingley, B, Weingrill, J, & Wuchterl, G. (2012). Transiting exoplanets from the CoRoT space mission XXI. CoRoT-19b: A low density planet orbiting an old inactive F9V-star. *Astronomy and Astrophysics*, **537**, 136. <http://hdl.handle.net/2268/107269>

Hellier, C, Anderson, D. R, Collier Cameron, A, Doyle, A. P, **Gillon, M**, **Jehin, E**, Lendl, M, Maxted, P. F. L, Pepe, F, Pollacco, D, Queloz, D, Segransan, D, Smalley, B, Smith, A. M. S, Southworth, J, Triaud, A. H. M. J, Udry, S, & West, R. G. (2012). Seven transiting hot-Jupiters from WASP-South, Euler and TRAPPIST: WASP-47b, WASP-55b, WASP-61b, WASP-62b, WASP-63b, WASP-66b & WASP-67b. *Monthly Notices of the Royal Astronomical Society*, **426**, 739. <http://hdl.handle.net/2268/120920>

Lendl, M, Anderson, D. R, Collier-Cameron, A, Doyle, A. P, **Gillon, M**, Hellier, C, **Jehin, E**, Lister, T. A, Maxted, P. F. L, Pepe, F, Pollacco, D, Queloz, D, Smalley, B, Segransan, D, Smith, A. M. S, Triaud, A. H. M. J, Udry, S, West, R. G, & Wheatley, P. J. (2012). WASP-42 b and WASP-49 b: two new transiting Saturns. *Astronomy and Astrophysics*, **544**, 72. <http://hdl.handle.net/2268/124445>

Löhne, T, Augereau, J.-C, Ertel, S, Marshall, J. P, Eiroa, C, Mora, A, Absil, O, Stapelfeldt, K, Thébault, P, Bayo, A, Del Burgo, C, Danchi, W, Krivov, A. V, Lebreton, J, Letawe, G, **Magain, P**, Maldonado, J, Montesinos, B, Pilbratt, G. L, White, G. J, & Wolf, S. (2012). Modelling the huge, Herschel-resolved debris ring around HD 207129. *Astronomy and Astrophysics*, **537**, 110. <http://hdl.handle.net/2268/109563>

Löhne, T, Eiroa, C, Augereau, J.-C, Ertel, S, Marshall, J. P, Mora, A, Absil, O, Stapelfeldt, K, Thébault, P, Bayo, A, del Burgo, C, Danchi, W, Krivov, A. V, Lebreton, J, Letawe, G, **Magain, P**, Maldonado, J, Montesinos, B, Pilbratt, G. L, White, G. J, & Wolf, S. (2012). Debris disks as seen by Herschel/DUNES. *Astronomische Nachrichten*, **333**, 441. <http://hdl.handle.net/2268/131574>

Ollivier, M, **Gillon, M**, Santerne, A, Wuchterl, G, Havel, M, Bruntt, H, Bordé, P, Pasternacki, T, Endl, M, Gandolfi, D, Aigrain, S, Almenara, J. M, Alonso, R, Auvergne, M, Baglin, A, Barge, P, Bonomo, A. S, Bouchy, F, Cabrera, J, Carone, L, Carpano, S, Cavarroc, C, Cochran, W. D, Csizmadia, S, Deeg, H. J, Deleuil, M, Diaz, R. F, Dvorak, R, Erikson, A, Ferraz-Mello, S, Fridlund, M, Gazzano, J.-C, Grziwa, S, Guenther, E, Guillot, T, Guterman, P, Hatzes, A, Hébrard, G, Lammer, H, Léger, A, Lovis, C, MacQueen, P. J, Mayor, M, Mazeh, T, Moutou, C, Ofir, A, Pätzold, M, Queloz, D, Rauer, H, Rouan, D, Samuel, B, Schneider, J, Tadeu dos Santos, M, Tal-Or, L, Tingley, B, & Weingrill, J. (2012). Transiting exoplanets from the CoRoT space mission. XXII. CoRoT-16b: a hot Jupiter with a hint of eccentricity around a faint solar-like star. *Astronomy and Astrophysics*, **541**, 149. <http://hdl.handle.net/2268/124448>

Ortiz, J. L, Sicardy, B, Braga-Ribas, F, Alvarez-Candal, A, Lellouch, E, Duffard, R, Pinilla-Alonso, N, Ivanov, V. D, Littlefair, S. P, Camargo, J. I. B, Assafin, M, Unda-Sanzana, E, **Jehin, E**, Morales, N, Tancredi, G, Gil-Hutton, R, de La Cueva, I, Colque, J. P, da Silva Neto, D. N, Manfroid, J, Thirouin, A, Gutiérrez, P. J, Lecacheux, J, **Gillon, M**, Maury, A, Colas, F, Licandro, J, Mueller, T, Jacques, C, Weaver, D, Milone, A, Salvo, R, Bruzzone, S, Organero, F, Behrend, R, Roland, S, Vieira-Martins, R, Widemann, T, Roques, F, Santos-Sanz, P, Hestroffer, D, Dhillon, V. S, Marsh, T. R, Harlinton, C, Bagatin, A. C, Alonso, M. L, Ortiz, M, Colazo, C, Lima, H. J. F, Oliveira, A. S, Kerber, L. O, Smiljanic, R, Pimentel, E, Giacchini, B, Cacella, P, & Emilio, M. (2012). Albedo and atmospheric constraints of dwarf planet Makemake from a stellar occultation. *Nature*, **491**, 566-569. <http://hdl.handle.net/2268/142198>

Pätzold, M, Endl, M, Csizmadia, S, Gandolfi, D, Jorda, L, Grziwa, S, Carone, L, Pasternacki, T, Aigrain, S, Almenara, J. M, Alonso, R, Auvergne, M, Baglin, A, Barge, P, Bonomo, A. S, Bordé, P, Bouchy, F, Cabrera, J, Cavarroc, C, Cochran, W. B, Deleuil, M, Deeg, H. J, Díaz, R, Dvorak, R, Erikson, A, Ferraz-Mello, S, Fridlund, M, **Gillon, M**, Guillot, T, Hatzes, A, Hébrard, G, Léger, A, Llebaria, A, Lammer, H, MacQueen, P. J, Mazeh, T, Moutou, C, Ofir, A, Ollivier, M, Parviainen, H, Queloz, D, Rauer, H, Rouan, D, Santerne, A, Schneider, J, Tingley, B, Weingrill, J, & Wuchterl, G. (2012). Transiting exoplanets from the CoRoT space mission. XXIII. CoRoT-21b: a doomed large Jupiter around a faint subgiant star. *Astronomy and Astrophysics*, **545**, 6. <http://hdl.handle.net/2268/135477>

Rousselot, P, **Jehin, E**, Manfroid, J, & Hutsemekers, D. (2012). The 12C2/12C13C isotopic ratio in comets C/2001 Q4 (NEAT) and C/2002 T7 (LINEAR). *Astronomy and Astrophysics*, **545**, 24, 1-7. <http://hdl.handle.net/2268/129998>

Sluse, D, **Chantry, V, Magain, P**, Courbin, F, & Meylan, G. (2012). COSMOGRAIL: the COSmological MONitoring of GRAVitational Lenses X. Modeling based on high-precision astrometry of a sample of 25 lensed quasars: consequences for ellipticity, shear, and astrometric anomalies. *Astronomy and Astrophysics*, **538**, 99. <http://hdl.handle.net/2268/110584>

Smalley, B, Anderson, D. R, Collier-Cameron, A, Doyle, A. P, **Gillon, M**, Hellier, C, **Jehin, E**, Lendl, M, Maxted, P. F. L, Pepe, F, Pollacco, D, Queloz, D, Segransan, D, Smith, A. M. S, Southworth, J, Triaud, A. H. M. J, Udry, S, & West, R. G. (2012). WASP-78b and WASP-79b: Two highly-bloated hot Jupiter-mass exoplanets orbiting F-type stars in Eridanus. *Astronomy and Astrophysics*, **547**, 61. <http://hdl.handle.net/2268/124585>

Smith, A. M. S, Anderson, D. R, Collier Cameron, A, **Gillon, M**, Hellier, C, Lendl, M, Maxted, P. F. L, Queloz, D, Smalley, B, Triaud, A. H. M. J, West, R. G, Barros, S. C. C, **Jehin, E**, Pepe, F, Pollacco, D, Segransan, D, Southworth, J, Street, R. A, & Udry, S. (2012). WASP-36b: A new transiting planet around a metal-poor G-dwarf, and an analysis of correlated noise in transit light curves. *Astronomical Journal (The)*, **143**(4), 10. <http://hdl.handle.net/2268/104232>

Tewes, M, Courbin, F, Meylan, G, Kochanek, C. S, **Eulaers, E**, Cantale, N, Mosquera, A. M, Asfandiyarov, I, **Magain, P**, Van Winckel, H, Sluse, D, Keerthi, R. K. S, Stalin, C. S, Prabhu, T. P, Saha, P, & Dye, S. (2012). COSMOGRAIL: Measuring Time Delays of Gravitationally Lensed Quasars to Constrain Cosmology. *The Messenger*. <http://hdl.handle.net/2268/140241>

Doyle, A. P, Smalley, B, Maxted, P. F. L, Anderson, D. R, Collier Cameron, A, **Gillon, M**, Hellier, C, Pollacco, D, Queloz, D, Triaud, A. H. M. J, & West, R. G. (2013). Accurate spectroscopic parameters of WASP planet host stars. *Monthly Notices of the Royal Astronomical Society*, **428**(4), 3164-3172. <http://hdl.handle.net/2268/135078>

Maxted, P. F. L, Anderson, D. R, Collier Cameron, A, Doyle, A. P, **Fumel, A, Gillon, M**, Hellier, C, **Jehin, E**, Lendl, M, Pepe, F, Pollacco, D. L, Queloz, D, Ségransan, D, Smalley, B, Southworth, K, Smith, A. M. S, Triaud, A. H. M. J, Udry, S, & West, R. G. (2013). WASP-77 Ab: A Transiting Hot Jupiter Planet in a Wide Binary System. *Publications of the Astronomical Society of the Pacific*, **125**, 48-55. <http://hdl.handle.net/2268/142192>

Maxted, P. F. L, Anderson, D. R, Doyle, A. P, **Gillon, M**, Harrington, J, Iro, N, **Jehin, E**, Lafrenière, D, Smalley, B, & Southworth, J. (2013). Spitzer 3.6 micron and 4.5 micron full-orbit lightcurves of WASP-18. *Monthly Notices of the Royal Astronomical Society*, **428**(3), 2645-2660. <http://hdl.handle.net/2268/135080>

Triaud, A. H. M. J, Hebb, L, Anderson, D. R, Cargile, P, Collier Cameron, A, Doyle, A. P, Faedi, F, **Gillon, M**, Gomez Maqueo Chew, Y, Hellier, C, **Jehin, E**, Maxted, P, Naef, D, Pepe, F, Pollacco, D, Queloz, D, Ségransan, D, Smalley, B, Stassun, K, Udry, S, & West, R. G. (2013). The EBLM Project I- Physical and orbital parameters, including spin-orbit angles, of two low-mass eclipsing binaries on opposite sides of the Brown Dwarf limit. *Astronomy and Astrophysics*, **549**, 18. <http://hdl.handle.net/2268/135087>

Atmospheric and Planetary Physics

Ajello, J.M., West, R.A., **Gustin, J.**, Larsen, K., A.I.F. Stewart, Esposito, L.W., McClintock, W.E. Holsclaw, G.M., Bradley, E.T. (2012). Cassini UVIS observations of Titan nightglow spectra. *Journal of Geophysical Research*, **117**, A12, A12315, doi: 10.1029/2012JA017888 <http://hdl.handle.net/2268/140074>

Arridge, C. S, Agnor, C. B, Andre, N, Baines, K, **Gustin, J.**, & and 74 coauthors. (2012). Uranus Pathfinder: exploring the origins and evolution of Ice Giant planets. *Experimental Astronomy*. 33, 753-791, doi : 10.1007/s10686-011-9251-4 <http://hdl.handle.net/2268/128452>

Bonfond, B, Grodent, D, Gérard, J.-C., Stallard, T, Clarke, J. T, Yoneda, M, **Radioti, A, & Gustin, J.** (2012). Auroral evidence of Io's control over the magnetosphere of Jupiter. *Geophysical Research Letters*, **39**, 01105. <http://hdl.handle.net/2268/107782>

Bonfond, B. (2012). When Moons Create Aurora: The Satellite Footprints on Giant Planets. In A., Keiling, E., Donovan, F., Bagenal, & T., Karlsson (Eds.), *Auroral Phenomenology and Magnetospheric Processes: Earth and Other Planets* (133-140). Washington, DC, AGU.

Brovkin, V, Ganopolski, A, Archer, D, & **Munhoven, G.** (2012). Glacial CO₂ cycle as a succession of key physical and biogeochemical processes. *Climate of the Past*, **8**(1), 251-264. <http://hdl.handle.net/2268/111443>

Chikamoto, M. O, Menviel, L, Abe-Ouchi, A, Ohgaito, R, Timmermann, A, Okazaki, Y, Harada, N, Oka, A, & **Mouchet, A.** (2012). Variability in North Pacific intermediate and deep water ventilation during Heinrich events in two coupled climate models. *Deep-Sea Research Part II, Topical Studies in Oceanography*, **61-64**, 114-126.

Friedrich, T, Timmermann, A, Abe-Ouchi, A, Bates, N. R, Chikamoto, M. O, Church, M. J, Dore, J. E, Gledhill, D. K, González-Dávila, M, Heinemann, M, Ilyina, T, Jungclaus, J. H, McLeod, E, **Mouchet, A.**, & Santana-Casiano, J. M. (2012). Detecting regional anthropogenic trends in ocean acidification against natural variability. *Nature Climate Change*. <http://hdl.handle.net/2268/109579>

Gérard, J.-C, Soret, L, Piccioni, G, & Drossart, P. D. (2012). Spatial correlation of OH Meinel and O₂ Infrared Atmospheric nightglow emissions observed with VIRTIS-M on board Venus Express. *Icarus*. <http://hdl.handle.net/2268/100159>

Gustin, J, Bonfond, B, Grodent, D, & Gérard, J.-C. (2012). Conversion from HST ACS and STIS auroral counts into brightness, precipitated power, and radiated power for H₂ giant planets. *Journal of Geophysical Research. Space Physics*, **117**, 07316. <http://hdl.handle.net/2268/128466>

Hubert, B, Gérard, J.-C, Gustin, J, Bisikalo, D. V, Shematovich, V. I, & Gladstone, G. R. (2012). Cassini-UVIS observation of dayglow FUV emissions of carbon in the thermosphere of Venus. *Icarus*, **220**, 635-646. <http://hdl.handle.net/2268/128471>

Menviel, L, Timmermann, A, Timm, O, **Mouchet, A.** Abe-Ouchi, A, Chikamoto, M. O, Harada, N, Ohgaito, R, & Okazaki, Y. (2012). Removing the North Pacific halocline: effects on global climate, ocean circulation and the carbon cycle. *Deep-Sea Research Part II, Topical Studies in Oceanography*, **61-64**, 106-113.

Mouchet, A, Deleersnijder, E, & Primeau, F. (2012). The leaky funnel model revisited. *Tellus : Series A*, **64**, 19131.
<http://hdl.handle.net/2268/125250>

Soret, L, Gérard, J.-C, Piccioni, G, & Drossart, P. (2012). The OH Venus nightglow spectrum: intensity and vibrational composition from VIRTIS-Venus Express observations. *Planetary and Space Science*, **73**(1)
<http://hdl.handle.net/2268/128335>

Soret, L, Gérard, J.-C, Montmessin, F, Piccioni, G, Drossart, P, & Bertaux, J.-L. (2012). Atomic oxygen on the Venus nightside: Global distribution deduced from airglow mapping. *Icarus, International Journal of Solar System Studies*, **217**, 849-855.
<http://hdl.handle.net/2268/96290>

Stiepen, A, Soret, L, Gérard, J.-C, Cox, C, & Bertaux, J.-L. (2012). The vertical distribution of the Venus NO nightglow: limb profiles inversion and one-dimensional modeling. *Icarus*, **220**, 981-989.
<http://hdl.handle.net/2268/128275>

In press

Gérard, J.-C, Gustin, J, Pryor, W, **Grodent, D, Bonfond, B, Radioti, A**, Gladstone, G. R, Clarke, J. T, & Nichols, J. D. (2013). Remote sensing of the energy of auroral electrons in Saturn's atmosphere: Hubble and Cassini spectral observations. *Icarus*
<http://hdl.handle.net/2268/137232>

Gérard, J.-C, Soret, L, Migliorini, A, & Piccioni, G. (2013). Oxygen nightglow emissions of Venus: Vertical distribution and collisional quenching. *Icarus*, <http://dx.doi.org/10.1016/j.icarus.2012.11.019>.
<http://hdl.handle.net/2268/137233>

Migliorini, A, Piccioni, G, **Gérard, J.-C, Soret, L**, Slanger, T. G, Politi, R, Snels, M, Drossart, P, & Nuccilini, F. (2013). The characteristics of the O₂ Herzberg II and Chamberlain bands observed with VIRTIS/Venus Express. *Icarus*, <http://dx.doi.org/10.1016/j.icarus.2012.11.017>.
<http://hdl.handle.net/2268/137234>

Yoneda, M, Tsuchiya, F, Misawa, H, **Bonfond, B**, Tao, C, Kagitani, M, & Okano, S. (2013). Io's volcanism controls Jupiter's radio emissions. *Geophysical Research Letters*, doi:10.1002/grl.50095.
<http://hdl.handle.net/2268/138745>

Groupe InfraRouge de Physique Atmosphérique et Solaire (GIRPAS)

Duflot, V, Hurtmans, D, Clarisse, L, R'honi, Y, Vigouroux, C, De Mazière, M, **Mahieu, E, Servais, C**, Clerbaux, C, & Coheur, P.-F. (2012). Measurements of hydrogen cyanide (HCN) and acetylene (C₂H₂) from the Infrared Atmospheric Sounding Interferometer (IASI). *Atmospheric Measurement Techniques. Papers in Open Discussion*, 5(5), 7567-7586.

<http://hdl.handle.net/2268/132381>

Hendrick, F, **Mahieu, E**, Bodeker, G. E, Boersma, K. F, Chipperfield, M. P, De Mazière, M, De Smedt, I, **Demoulin, P**, Fayt, C, Hermans, C, Kreher, K, **Lejeune, B**, Pinardi, G, **Servais, C**, Stübi, R, van der A, R, Vernier, J.-P, & Van Roozendaal, M. (2012). Analysis of stratospheric NO₂ trends above Jungfraujoch using ground-based UV-visible, FTIR, and satellite nadir observations. *Atmospheric Chemistry and Physics*, 12, 8851-8864.

<http://hdl.handle.net/2268/121603>

Kerzenmacher, T, Dils, B, Kumps, N, Blumenstock, T, Clerbaux, C, Coheur, P.-F, **Demoulin, P**, Garcia, O, George, M, Griffith, D, Hase, F, Hadji-Lazaro, J, Hurtmans, D, Jones, N, **Mahieu, E**, Notholt, J, Paton-Walsh, C, Raffalski, U, Ridder, T, Schneider, M, **Servais, C**, & De Mazière, M. (2012). Validation of IASI FORLI carbon monoxide retrievals using FTIR data from NDACC. *Atmospheric Measurement Techniques*, 5, 2751-2761.

<http://hdl.handle.net/2268/124179>

Kohlhepp, R, Ruhnke, R, Chipperfield, M. P, De Mazière, M, Notholt, J, Barthlott, S, Batchelor, R. L, Blatherwick, R. D, Blumenstock, T, Coffey, M. T, **Demoulin, P**, Fast, H, Feng, W, Goldman, A, Griffith, D. W. T, Hamann, K, Hannigan, J. W, Hase, F, Jones, N. B, Kagawa, A, Kaiser, I, Kasai, Y, Kirner, O, Kouker, W, Lindenmaier, R, **Mahieu, E**, Mittermeier, R. L, Monge-Sanz, B, Morino, I, Murata, I, Nakajima, H, Palm, M, Paton-Walsh, C, Raffalski, U, Reddman, T, Rettinger, M, Rinsland, C. P, Rozanov, E, Schneider, M, Senten, C, **Servais, C**, Sinnhuber, B.-M, Smale, D, Strong, K, Sussmann, R, Taylor, J. R, Vanhalewyn, G, Warneke, T, Whaley, C, Wiehle, M, & Wood, S. W. (2012). Observed and simulated time evolution of HCl, ClONO₂, and HF total column abundances. *Atmospheric Chemistry and Physics*, 12(7), 3527-3556.

<http://hdl.handle.net/2268/117940>

Rinsland, C. P, **Mahieu, E, Demoulin, P, Zander, R, Servais, C**, & Hartmann, J.-M. (2012). Decrease of the Carbon Tetrachloride (CCl₄) Loading above Jungfraujoch, based on High Resolution Infrared Solar Spectra recorded between 1999 and 2011. *Journal of Quantitative Spectroscopy & Radiative Transfer*, 113, 1322-1329.

<http://hdl.handle.net/2268/121150>

Risi, C, Noone, D, Worden, J, Frankenberg, C, Stiller, G, Kiefer, M, Funke, B, Walker, K. A, Bernath, P. F, Schneider, M, Wunch, D, Sherlock, V, Deutscher, N, Griffith, D, Wennberg, P. O, Strong, K, Smale, D, **Mahieu, E**, Barthlott, S, Hase, F, Garcia, O, Notholt, J, Warneke, T, Toon, G. C, Sayres, D, Bony, S, Lee, J, Brown, D, Uemura, R, & Sturm, C. (2012). Process-evaluation of tropospheric humidity simulated by general circulation models using water vapor isotopologues: 1. Comparison between models and observations. *Journal of Geophysical Research*, 117(D5), 05303.

<http://hdl.handle.net/2268/123815>

Schneider, M, Barthlott, S, Hase, F, González, Y, Yoshimura, K, García, O. E, Sepúlveda, E, Gomez-Pelaez, A, Gisi, M, Kohlhepp, R, Dohe, S, Blumenstock, T, Wiegele, A, Christner, E, Strong, K, Weaver, D, Palm, M, Deutscher, N. M, Warneke, T, Notholt, J, **Lejeune, B, Demoulin, P**, Jones, N, Griffith, D. W. T, Smale, D, & Robinson, J. (2012). Ground-based remote sensing of tropospheric water vapour isotopologues within the project MUSICA. *Atmospheric Measurement Techniques*, 5(2012), 3007-3027.

<http://hdl.handle.net/2268/135828>

Schneider, M, **Demoulin, P**, Sussmann, R, & Notholt, J. (2012). Fourier Transform Infrared Spectrometry. In N., Kämpfer (Ed.), *Monitoring Atmospheric Water Vapour: Ground-Based Remote Sensing and In-situ Methods* (pp. 95-111). Springer.

<http://hdl.handle.net/2268/135998>

Chemical Oceanography Unit

- Artioli, Y, Blackford, J. C, Butenschön, M, Holt, J. T, Wakelin, S. L, Thomas, H, **Borges, A**, & Allen, J. I. (2012). The carbonate system in the North Sea: sensitivity and model validation. *Journal of Marine Systems*, **102-104**, 1-13.
<http://hdl.handle.net/2268/124580>
- Borges, A**, Bouillon, S, Abril, G, **Delille, B**, Poirier, D, Commarieu, M.-V, Lepoint, G, Morana, C, Champenois, W, Servais, P, Descy, J.-P, & **Darchambeau, F**. (2012). Variability of carbon dioxide and methane in the epilimnion of Lake Kivu. In J.-P., Descy, F., Darchambeau, & M., Schmid (Eds.), *Lake Kivu: Limnology and biogeochemistry of a tropical great lake* (pp. 47-66). Springer.
<http://hdl.handle.net/2268/124713>
- Bouillon, S, Yambélé, A, Spencer, R. G. M, Gillikin, D. P, Hernes, P. J, Six, J, Merckx, R, & **Borges, A**. (2012). Organic matter sources, fluxes and greenhouse gas exchange in the Oubangui River (Congo River basin). *Biogeosciences*, **9**, 2045–2062.
<http://hdl.handle.net/2268/124744>
- Champenois, W**, & **Borges, A**. (2012). Seasonal and interannual variations of community metabolism rates of a *Posidonia oceanica* seagrass meadow. *Limnology & Oceanography*, **57**(1), 347-361. <http://hdl.handle.net/2268/108047>
- Darchambeau, F**, Isumbisho, M, & Descy, J.-P. (2012). Zooplankton of Lake Kivu. In J.-P., Descy, F., Darchambeau, & M., Schmid (Eds.), *Lake Kivu, Limnology and Biogeochemistry of a Tropical Great Lake* (pp. 107-126). Dordrecht, Netherlands: Springer.
<http://hdl.handle.net/2268/140556>
- Descy, J.-P, **Darchambeau, F**, & Schmid, M. (2012). Lake Kivu Research: Conclusions and Perspectives. In J.-P., Descy, F., Darchambeau, & M., Schmid (Eds.), *Lake Kivu, Limnology and Biogeochemistry of a Tropical Great Lake* (pp. 181-190). Dordrecht, Netherlands: Springer.
<http://hdl.handle.net/2268/140560>
- Engel, A, **Harlay, J**, Piontek, J, & Chou, L. (2012). Contribution of combined carbohydrates to dissolved and particulate organic carbon after the spring bloom in the northern Bay of Biscay (North-Eastern Atlantic Ocean). *Continental Shelf Research*, **45**, 42-53.
<http://hdl.handle.net/2268/130460>
- Geilfus, N.-X, Carnat, G, Papakyriakou, T, Tison, J.-L, Else, B, Thomas, H, Shadwick, E, & **Delille, B**. (2012). Dynamics of pCO₂ and related air-ice CO₂ fluxes in the Arctic coastal zone (Amundsen Gulf, Beaufort Sea). *Journal of Geophysical Research. Oceans*, **117**(C00G10).
<http://hdl.handle.net/2268/125925>
- Geilfus, N.-X, **Delille, B**, Verbeke, V, & Tison, J.-L. (2012). Towards a method for high vertical resolution measurements of the partial pressure of CO₂ within bulk sea ice. *Journal of Glaciology*, **58**(208), 287-300.
<http://hdl.handle.net/2268/127972>
- Guillard, J, **Darchambeau, F**, Mulungula, P. M, & Descy, J.-P. (2012). Is the fishery of the introduced Tanganyika sardine (*Limnothrissa miodon*) in Lake Kivu (East Africa) sustainable? *Journal of Great Lakes Research*, **38**(3), 524-533.
<http://hdl.handle.net/2268/136629>

Llirós, M, Descy, J.-P, Libert, X, Morana, C, Schmitz, M, Wimba, L, Nzavuga-Izere, A, García-Armisen, T, Borrego, C, Servais, P, & **Darchambeau, F.** (2012). Microbial Ecology of Lake Kivu. In J.-P., Descy, F., Darchambeau, & M., Schmid (Eds.), *Lake Kivu, Limnology and Biogeochemistry of a Tropical Great Lake* (pp. 85-105). Dordrecht, Netherlands: Springer.

<http://hdl.handle.net/2268/140559>

Moutin, T, Prieur, L, Jeanthon, C, & **Borges, A.** (Eds.). (2012). *Interactions between planktonic organisms and the biogeochemical cycles of biogenic elements in the Mediterranean Sea during intense summer stratification: the BOUM experiment.* EGU.

<http://hdl.handle.net/2268/141257>

Polsenaere, P, Lamaud, E, Lafon, V, Bonnefond, J.-M, Bretel, P, **Delille, B,** Deborde, J, Loustau, D, & Abril, G. (2012). Spatial and temporal CO₂ exchanges measured by Eddy Covariance over a temperate intertidal flat and their relationships to net ecosystem production. *Biogeosciences*, **9**(1), 249-268.

<http://hdl.handle.net/2268/115103>

Sarmento, H, **Darchambeau, F,** & Descy, J.-P. (2012). Phytoplankton of Lake Kivu. In J.-P., Descy, F., Darchambeau, & M., Schmid (Eds.), *Lake Kivu, Limnology and Biogeochemistry of a Tropical Great Lake* (pp. 67-83). Dordrecht, Netherlands: Springer.

<http://hdl.handle.net/2268/140558>

Tamooch, F, Van den Meersche, K, Meysman, F, Marwick, T, **Borges, A,** Merckx, R, Dehairs, F, Schmidt, S, Nyunja, J, & Bouillon, S. (2012). Distribution and origin of suspended matter and organic carbon pools in the Tana River Basin, Kenya. *Biogeosciences*, **9**, 2905–2920.

<http://hdl.handle.net/2268/128577>

Thomas, H, & **Borges, A.** (Eds.). (2012). *Biogeochemistry of coastal seas and continental shelves e Including biogeochemistry during the International Polar Year: Estuarine, Coastal and Shelf Science, volume 100.* Elsevier.

<http://hdl.handle.net/2268/116751>

In press

Schmidt, S, **Harlay, J, Borges, A,** Groom, S, **Delille, B,** Roevros, N, Christodoulou, S, & Chou, L. (2013). Particle export during a bloom of *Emiliana huxleyi* in the North-West European continental margin. *Journal of Marine Systems*, **109-110**, 182-s190.

<http://hdl.handle.net/2268/80860>

Speich, S, Dehairs, F, Sicre, M.-A, **Borges, A,** & Hoppema, M. (Eds.). (2013). *The BONUS-GoodHope IPY project: dynamics and biogeochemistry interactions in the Southern Ocean south off Africa.* EGU.

<http://hdl.handle.net/2268/141256>

Climate and Biogeochemical Cycles Modeling Units

Hamon, N, Sepulchre, P, Donnadiou, Y, Henrot, A.-J, **François, L**, Jaeger, J.-J, & Ramstein, G. (2012). Growth of subtropical forests in Miocene Europe: The roles of carbon dioxide and Antarctic ice volume. *Geology*, **40**, 567-570.
<http://hdl.handle.net/2268/117251>

Niu, S, Fei, S, Yuan, W, Schimel, D, Ammann, C, Arain, A, Arneth, A, Aubinet, M, Barr, A, Beringer, J, Bernhofer, C, Black, T. A, Buchmann, N, Cescatti, A, Chen, J, Davis, K. J, Dellwik, E, Desai, A. R, Etzold, S, **François, L**, Gianelle, D, Gielen, B, Goldstein, A, Groenendijk, M, Gu, L, & et al. (2012). Thermal optimality of net ecosystem exchange of carbon dioxide and underlying mechanisms. *New Phytologist*, **194**, 775-783.
<http://hdl.handle.net/2268/122856>

Reyer, C, Leuzinger, S, Ramming, A, Wolf, A, Bartholomeus, R. P, Bonfante, A, de Lorenzi, F, **Dury, M**, Gloning, P, Abou Jaoudé, R, Klein, T, Kuster, T. M, Martins, M, Niedrist, G, Riccardi, M, Wohlfahrt, G, de Angelis, P, de Dato, G, **François, L**, Menzel, A, & Pereira, M. (2012). A plant's perspective of extremes: Terrestrial plant responses to changing climatic variability. *Global Change Biology*.
<http://hdl.handle.net/2268/132060>

Schott, J, Oelkers, E. H, Bénézech, P, Goddérès, Y, & **François, L**. (2012). Can accurate kinetic laws be created to describe chemical weathering ? *Comptes Rendus Geoscience*, **344**, 568-585.
<http://hdl.handle.net/2268/143761>

In press

Goddérès, Y, Brantley, S. L, **François, L**, Schott, J, Pollard, D, Déqué, M, & **Dury, M**. (2013). Rates of consumption of atmospheric CO₂ through the weathering of loess during the next 100 yr of climate change. *Biogeosciences*, **10**, 135-148.
<http://hdl.handle.net/2268/143750>

Extragalactic Astrophysics and Space Observations

Bachelet, E, Fouqué, P, Han, C, Gould, A, Albrow, M. D, Beaulieu, J.-P, Bertin, E, Bond, I. A, Christie, G. W, Heyrovský, D, Horne, K, Jørgensen, U. G, Maoz, D, Mathiasen, M, Matsunaga, N, McCormick, J, Menzies, J, Nataf, D, Natusch, T, Oi, N, Renon, N, Tsapras, Y, Udalski, A, Yee, J. C, Batista, V, Bennett, D. P, Brilliant, S, Caldwell, J. A. R, Cassan, A, Cole, A, Cook, K. H, Coutures, C, Dieters, S, Dominik, M, Dominis Prester, D, Donatowicz, J, Greenhill, J, Kains, N, Kane, S. R, Marquette, J.-B, Martin, R, Pollard, K. R, Sahu, K. C, Street, R. A, Wambsganss, J, Williams, A, Zub, M, **PLANET Collaboration, Bos, M, Dong, S, Drummond, J, Gaudi, B. S, Graff, D, Janczak, J, Kaspi, S, Kozłowski, S, Lee, C.-U, Monard, L. A. G, Muñoz, J. A, Park, B.-G, Pogge, R. W, Polishook, D, Shporer, A, Fun Collaboration, Abe, F, Botzler, C. S, Fukui, A, Furusawa, K, Hearnshaw, J. B, Itow, Y, Korpela, A. V, Ling, C. H, Masuda, K, Matsubara, Y, Miyake, N, Muraki, Y, Ohnishi, K, Rattenbury, N. J, Saito, T, Sullivan, D, Sumi, T, Suzuki, D, Sweatman, W. L, Tristram, P. J, Wada, K, Moa Collaboration, Allan, A, Bode, M. F, Bramich, D. M, Clay, N, Fraser, S. N, Hawkins, E, Kerins, E, Lister, T. A, Mottram, C. J, Saunders, E. S, Snodgrass, C, Steele, I. A, Wheatley, P. J, Robonet-II Collaboration, Bozza, V, Browne, P, Burgdorf, M. J, Calchi Novati, S, Dreizler, S, **Finet, F**, Glittrup, M, Grundahl, F, HarpsøE, K, Hessman, F. V, Hinse, T. C, Hundertmark, M, Liebig, C, Maier, G, Mancini, L, Rahvar, S, **Ricci, D**, Scarpetta, G, Skottfelt, J, Southworth, J, **Surdej, J**, Zimmer, F, & Mindstep Consortium. (2012). A brown dwarf orbiting an M-dwarf: MOA 2009-BLG-411L. *Astronomy and Astrophysics*, **547**, 55. <http://hdl.handle.net/2268/142813>**

Bachelet, E, Shin, I.-G, Han, C, Fouqué, P, Gould, A, Menzies, J. W, Beaulieu, J.-P, Bennett, D. P, Bond, I. A, Dong, S, Heyrovský, D, Marquette, J.-B, Marshall, J, Skowron, J, Street, R. A, Sumi, T, Udalski, A, Abe, L, Agabi, K, Albrow, M. D, Allen, W, Bertin, E, Bos, M, Bramich, D. M, Chavez, J, Christie, G. W, Cole, A. A, Crouzet, N, Dieters, S, Dominik, M, Drummond, J, Greenhill, J, Guillot, T, Henderson, C. B, Hessman, F. V, Horne, K, Hundertmark, M, Johnson, J. A, Jørgensen, U. G, Kandori, R, Liebig, C, Mékarnia, D, McCormick, J, Moorhouse, D, Nagayama, T, Nataf, D, Natusch, T, Nishiyama, S, Rivet, J.-P, Sahu, K. C, Shvartzvald, Y, Thornley, G, Tomczak, A. R, Tsapras, Y, Yee, J. C, Batista, V, Bennett, C. S, Brilliant, S, Caldwell, J. A. R, Cassan, A, Corrales, E, Coutures, C, Dominis Prester, D, Donatowicz, J, Kubas, D, Martin, R, Williams, A, Zub, M, The PLANET Collaboration, de Almeida, L. A, DePoy, D. L, Gaudi, B. S, Hung, L.-W, Jablonski, F, Kaspi, S, Klein, N, Lee, C.-U, Lee, Y, Koo, J.-R, Maoz, D, Muñoz, J. A, Pogge, R. W, Polishook, D, Shporer, A, μ Collaboration, T. F. U. N, Abe, F, Botzler, C. S, Chote, P, Freeman, M, Fukui, A, Furusawa, K, Harris, P, Itow, Y, Kobara, S, Ling, C. H, Masuda, K, Matsubara, Y, Miyake, N, Ohmori, K, Ohnishi, K, Rattenbury, N. J, Saito, T, Sullivan, D. J, Suzuki, D, Sweatman, W. L, Tristram, P. J, Wada, K, Yock, P. C. M, The MOA Collaboration, **Szymański, M. K, Soszyński, I, Kubiak, M, Poleski, R, Ulaczyk, K, Pietrzyński, G, Wyrzykowski, The OGLE Collaboration, Kains, N, Snodgrass, C, Steele, I. A, The RoboNet Collaboration, Alsubai, K. A, Bozza, V, Browne, P, Burgdorf, M. J, Calchi Novati, S, Dodds, P, Dreizler, S, **Finet, F**, Gerner, T, Hardis, S, Harpsøe, K, Hinse, T. C, Kerins, E, Mancini, L, Mathiasen, M, Penny, M. T, Proft, S, Rahvar, S, **Ricci, D**, Scarpetta, G, Schäfer, S, Schönebeck, F, Southworth, J, **Surdej, J**, Wambsganss, J, & MiNDSTEp Consortium, T. (2012). MOA 2010-BLG-477Lb: Constraining the Mass of a Microlensing Planet from Microlensing Parallax, Orbital Motion, and Detection of Blended Light. *Astrophysical Journal*, **754**, 73. <http://hdl.handle.net/2268/142598>**

Bozza, V, Dominik, M, Rattenbury, N. J, Jørgensen, U. G, Tsapras, Y, Bramich, D. M, Udalski, A, Bond, I. A, Liebig, C, Cassan, A, Fouqué, P, Fukui, A, Hundertmark, M, Shin, I.-G, Lee, S. H, Choi, J.-Y, Park, S.-Y, Gould, A, Allan, A, Mao, S, Wyrzykowski, Street, R. A, Buckley, D, Nagayama, T, Mathiasen, M, Hinse, T. C, Novati, S. C, Harpsøe, K, Mancini, L, Scarpetta, G, Anguita, T, Burgdorf, M. J, Horne, K, Hornstrup, A, Kains, N, Kerins, E, Kjærgaard, P, Masi, G, Rahvar, S, **Ricci, D**, Snodgrass, C, Southworth, J, Steele, I. A, **Surdej, J**, Thöne, C. C, Wambsganss, J, Zub, M, Albrow, M. D, Batista, V, Beaulieu, J.-P, Bennett, D. P, Caldwell, J. A. R, Cole, A. A, Cook, K. H, Coutures, C, Dieters, S, Prester, D. D, Donatowicz, J, Greenhill, J, Kane, S. R, Kubas, D, Marquette, J.-B, Martin, R, Menzies, J, Pollard,

K. R, Sahu, K. C, Williams, A, Szymański, M. K, Kubiak, M, Pietrzyński, G, Soszyński, I, Poleski, R, Ulaczyk, K, DePoy, D. L, Dong, S, Han, C, Janczak, J, Lee, C.-U, Pogge, R. W, Abe, F, Furusawa, K, Hearnshaw, J. B, Itow, Y, Kilmartin, P. M, Korpela, A. V, Lin, W, Ling, C. H, Masuda, K, Matsubara, Y, Miyake, N, Muraki, Y, Ohnishi, K, Perrott, Y. C, Saito, T, Skuljan, L, Sullivan, D. J, Sumi, T, Suzuki, D, Sweatman, W. L, Tristram, P. J, Wada, K, Yock, P. C. M, Gulbis, A, Hashimoto, Y, Kniazev, A, & Vaisanen, P. (2012). OGLE-2008-BLG-510: first automated real-time detection of a weak microlensing anomaly - brown dwarf or stellar binary? *Monthly Notices of the Royal Astronomical Society*, **424**, 902-918.

<http://hdl.handle.net/2268/142594>

Chiappetti, L, Clerc, N, Pacaud, F, Pierre, M, Gueguen, A, Paloro, L, Polletta, M, **Melnyk, O, Elyiv, A, Surdej, J**, & Faccioli, L. (2012, November 01). The XMM-LSS catalogue: X-ray sources and associated multiwavelength data. Version II. *Astronomy and Astrophysics*.

<http://hdl.handle.net/2268/142588>

Choi, J.-Y, Shin, I.-G, Han, C, Udalski, A, Sumi, T, Gould, A, Bozza, V, Dominik, M, Fouqué, P, Horne, K, Szymański, M. K, Kubiak, M, Soszyński, I, Pietrzyński, G, Poleski, R, Ulaczyk, K, Pietrukowicz, P, Kozłowski, S, Skowron, J, Wyrzykowski, The OGLE Collaboration, Abe, F, Bennett, D. P, Bond, I. A, Botzler, C. S, Chote, P, Freeman, M, Fukui, A, Furusawa, K, Itow, Y, Kobara, S, Ling, C. H, Masuda, K, Matsubara, Y, Miyake, N, Muraki, Y, Ohmori, K, Ohnishi, K, Rattenbury, N. J, Saito, T, Sullivan, D. J, Suzuki, D, Suzuki, K, Sweatman, W. L, Takino, S, Tristram, P. J, Wada, K, Yock, P. C. M, The MOA Collaboration, Bramich, D. M, Snodgrass, C, Steele, I. A, Street, R. A, Tsapras, Y, The RoboNet Collaboration, Alsubai, K. A, Browne, P, Burgdorf, M. J, Calchi Novati, S, Dodds, P, Dreizler, S, Fang, X.-S, Grundahl, F, Gu, C.-H, Hardis, S, Harpsøe, K, Hinse, T. C, Hornstrup, A, Hundertmark, M, Jessen-Hansen, J, Jørgensen, U. G, Kains, N, Kerins, E, Liebig, C, Lund, M, Lunkkivist, M, Mancini, L, Mathiasen, M, Penny, M. T, Rahvar, S, **Ricci, D**, Scarpetta, G, Skottfelt, J, Southworth, J, **Surdej, J**, Tregloan-Reed, J, Wambsganss, J, **Wertz, O**, MiNDSTEp Consortium, T, Almeida, L. A, Batista, V, Christie, G, DePoy, D. L, Dong, S, Gaudi, B. S, Henderson, C, Jablonski, F, Lee, C.-U, McCormick, J, McGregor, D, Moorhouse, D, Natusch, T, Ngan, H, Pogge, R. W, Tan, T.-G, Thornley, G, Yee, J. C, The μ FUN Collaboration, Albrow, M. D, Bachelet, E, Beaulieu, J.-P, Brilliant, S, Cassan, A, Cole, A. A, Corrales, E, Coutures, C, Dieters, S, Dominis Prester, D, Donatowicz, J, Greenhill, J, Kubas, D, Marquette, J.-B, Menzies, J. W, Sahu, K. C, Zub, M, & The PLANET Collaboration. (2012). A New Type of Ambiguity in the Planet and Binary Interpretations of Central Perturbations of High-magnification Gravitational Microlensing Events. *Astrophysical Journal*, **756**, 48.

<http://hdl.handle.net/2268/142593>

Choi, J.-Y, Shin, I.-G, Park, S.-Y, Han, C, Gould, A, Sumi, T, Udalski, A, Beaulieu, J.-P, Street, R, Dominik, M, Allen, W, Almeida, L. A, Bos, M, Christie, G. W, Depoy, D. L, Dong, S, Drummond, J, Gal-Yam, A, Gaudi, B. S, Henderson, C. B, Hung, L.-W, Jablonski, F, Janczak, J, Lee, C.-U, Mallia, F, Maury, A, McCormick, J, McGregor, D, Monard, L. A. G, Moorhouse, D, Muñoz, J. A, Natusch, T, Nelson, C, Park, B.-G, Pogge, R. W, "TG" Tan, T.-G, Thornley, G, Yee, J. C, The μ FUN Collaboration, Abe, F, Barnard, E, Baudry, J, Bennett, D. P, Bond, I. A, Botzler, C. S, Freeman, M, Fukui, A, Furusawa, K, Hayashi, F, Hearnshaw, J. B, Hosaka, S, Itow, Y, Kamiya, K, Kilmartin, P. M, Kobara, S, Korpela, A, Lin, W, Ling, C. H, Makita, S, Masuda, K, Matsubara, Y, Miyake, N, Muraki, Y, Nagaya, M, Nishimoto, K, Ohnishi, K, Okumura, T, Omori, K, Perrott, Y. C, Rattenbury, N, Saito, T, Skuljan, L, Sullivan, D. J, Suzuki, D, Suzuki, K, Sweatman, W. L, Takino, S, Tristram, P. J, Wada, K, Yock, P. C. M, The MOA Collaboration, Szymański, M. K, Kubiak, M, Pietrzyński, G, Soszyński, I, Poleski, R, Ulaczyk, K, Wyrzykowski, Kozłowski, S, Pietrukowicz, P, The OGLE Collaboration, Albrow, M. D, Bachelet, E, Batista, V, Bennett, C. S, Bowens-Rubin, R, Brilliant, S, Cassan, A, Cole, A, Corrales, E, Coutures, C, Dieters, S, Dominis Prester, D, Donatowicz, J, Fouqué, P, Greenhill, J, Kane, S. R, Menzies, J, Sahu, K. C, Wambsganss, J, Williams, A, Zub, M, The PLANET Collaboration, Allan, A, Bramich, D. M, Browne, P, Clay, N, Fraser, S, Horne, K, Kains, N, Mottram, C, Snodgrass, C, Steele, I, Tsapras, Y, The RoboNet Collaboration, Alsubai, K. A, Bozza, V, Burgdorf, M. J, Calchi Novati, S, Dodds, P, Dreizler, S, **Finet, F**, Gerner, T, Glittrup, M, Grundahl, F, Hardis, S, Harpsøe, K, Hinse, T. C, Hundertmark, M, Jørgensen, U. G, Kerins, E, Liebig, C, Maier, G, Mancini, L, Mathiasen, M, Penny, M. T, Proft, S, Rahvar, S, **Ricci, D**, Scarpetta, G, Schäfer, S, Schönebeck, F, Skottfelt, J, **Surdej, J**, Southworth, J, Zimmer, F, & MiNDSTEp Consortium, T. (2012). Characterizing Lenses and Lensed Stars of High-magnification Single-lens Gravitational Microlensing Events with Lenses Passing over Source Stars. *Astrophysical Journal*, **751**, 41.

<http://hdl.handle.net/2268/142599>

D'Onofrio, M, Marziani, P, Sulentic, J. W, Dultzin, D, Efimov, Y, Gaskell, M, Vestergaard, M, **Hutsemekers, D**, Franceschini, A, Laor, A, Grupe, D, Lipari, S, Lorenzo, B. G, Mediavilla, E, Boroson, T, Eracleous, M, Marquez-Perez, I, Kording, E, & Falcke, H. (2012). Fifty Years of Quasars. Quasars Classes and Their Relationships. In D'Onofrio, M. (Ed.), *Fifty Years of Quasars: From Early Observations and Ideas to Future Research* (pp. 217-286). Heidelberg: Springer.
<http://hdl.handle.net/2268/131111>

D'Onofrio, M, Marziani, P, Sulentic, J. W, Shields, G, Kaspi, S, Padovani, P, **Hutsemekers, D**, McLure, R, Laor, A, Vestergaard, M, Czerny, B, Hryniewicz, K, & Dultzin, D. (2012). Fifty Years of Quasars. From Observations to Physical Parameters. In D'Onofrio, M. (Ed.), *Fifty Years of Quasars: From Early Observations and Ideas to Future Research* (pp. 287-336). Heidelberg: Springer.
<http://hdl.handle.net/2268/131110>

De Becker, M, Sana, H, **Absil, O**, Le Bouquin, J.-B, & Blomme, R. (2012). The long period eccentric orbit of the particle accelerator HD167971 revealed by long baseline interferometry. *Monthly Notices of the Royal Astronomical Society*, **423**, 2711-2717.
<http://hdl.handle.net/2268/118014>

Defrère, D, Lebreton, J, Le Bouquin, J.-B, Lagrange, A.-M, **Absil, O**, Augereau, J.-C, Berger, J.-P, di Folco, E, Ertel, S, Kluska, J, Montagnier, G, Millan-Gabet, R, Traub, W, & Zins, G. (2012). Hot circumstellar material resolved around β Pic with VLT/PIONIER. *Astronomy and Astrophysics*, **546**, 9.
<http://hdl.handle.net/2268/138854>

Delacroix, C, Forsberg, P, Karlsson, M, Mawet, D, **Absil, O**, Hanot, C, **Surdej, J**, & Habraken, S. (2012). Design, manufacturing, and performance analysis of mid-infrared achromatic half-wave plates with diamond subwavelength gratings. *Applied Optics*, **51**, 5897.
<http://hdl.handle.net/2268/131602>

Elyiv, A, Clerc, N, Plionis, M, **Surdej, J**, Pierre, M, Basilakos, S, Chiappetti, L, Gandhi, P, Gosset, E, **Melnyk, O**, & Pacaud, F. (2012). Angular correlation functions of X-ray point-like sources in the full exposure XMM-LSS field. *Astronomy and Astrophysics*, **537**, 131.
<http://hdl.handle.net/2268/110764>

Ertel, S, Wolf, S, Marshall, J. P, Eiroa, C, Augereau, J.-C, Krivov, A. V, Loehne, T, **Absil, O**, Ardila, D, Arevalo, M, Bayo, A, Bryden, G, del Burgo, C, Greaves, J, Kennedy, G, Lebreton, J, Liseau, R, Maldonado, J, Montesinos, B, Mora, A, Pilbratt, G. L, Sanz-Forcada, J, Stapelfeldt, K, & White, G. J. (2012). A peculiar class of debris disks from Herschel/DUNES - A steep fall off in the far infrared. *Astronomy and Astrophysics*, **541**, 148.
<http://hdl.handle.net/2268/117965>

Le Bouquin, J.-B, & **Absil, O**. (2012). On the sensitivity of closure phases to faint companions in optical long baseline interferometry. *Astronomy and Astrophysics*, **541**, 89.
<http://hdl.handle.net/2268/117963>

Löhne, T, Augereau, J.-C, Ertel, S, Marshall, J. P, Eiroa, C, Mora, A, **Absil, O**, Stapelfeldt, K, Thébault, P, Bayo, A, Del Burgo, C, Danchi, W, Krivov, A. V, Lebreton, J, Letawe, G, Magain, P, Maldonado, J, Montesinos, B, Pilbratt, G. L, White, G. J, & Wolf, S. (2012). Modelling the huge, Herschel-resolved debris ring around HD 207129. *Astronomy and Astrophysics*, **537**, 110.
<http://hdl.handle.net/2268/109563>

Löhne, T, Eiroa, C, Augereau, J.-C, Ertel, S, Marshall, J. P, Mora, A, **Absil, O**, Stapelfeldt, K, Thébault, P, Bayo, A, del Burgo, C, Danchi, W, Krivov, A. V, Lebreton, J, Letawe, G, Magain, P, Maldonado, J, Montesinos, B, Pilbratt, G. L, White, G. J, & Wolf, S. (2012). Debris disks as seen by Herschel/DUNES. *Astronomische Nachrichten*, **333**, 441.
<http://hdl.handle.net/2268/131574>

Malbet, F, Léger, A, Shao, M, Goullioud, R, Lagage, P.-O, Brown, A. G. A, Cara, C, Durand, G, Eiroa, C, Feautrier, P, Jakobsson, B, Hinglais, E, Kaltenecker, L, Labadie, L, Lagrange, A.-M, Laskar, J, Liseau, R, Lunine, J, Maldonado, J, Mercier, M, Mordasini, C, Queloz, D, Quirrenbach, A, Sozzetti, A, Traub, W, **Absil, O**, Alibert, Y, Andrei, A. H, Arenou, F, Beichman, C, Chelli, A, Cockell, C. S, Duvert, G, Forveille, T, Garcia, P. J. V, Hobbs, D, Krone-Martins, A, Lammer, H, Meunier, N, Minardi, S, Moitinho de Almeida, A, Rambaux, N, Raymond, S, Röttgering, H. J. A, Sahlmann, J, Schuller, P. A, Ségransan, D, Selsis, F, **Surdej, J**, Villaver, E, White, G. J, & Zinnecker, H. (2012). High precision astrometry mission for the detection and characterization of nearby habitable planetary systems with the Nearby Earth Astrometric Telescope (NEAT). *Experimental Astronomy*, **34**(2), 385-413.
<http://hdl.handle.net/2268/109578>

Mawet, D, **Absil, O**, Riaud, P, **Surdej, J**, Montagnier, G, Ducourant, C, Augereau, J.-C, Röttinger, S, Girard, J, Krist, J, & Stapelfeldt, K. (2012). Direct imaging of extra-solar planets in star forming regions. Lessons learned from a false positive around IM Lup. *Astronomy and Astrophysics*, **544**, 131. <http://hdl.handle.net/2268/126427>

Nazé, Y, Mahy, L, **Damerdji, Y**, Kobulnicky, H. A, Pittard, J. M, Parkin, E. R, **Absil, O**, & Blomme, R. (2012). The 2.35 year itch of Cygnus OB2 #9. I. Optical and X-ray monitoring. *Astronomy and Astrophysics*, **546**, 37. <http://hdl.handle.net/2268/132465>

Nazé, Y, Rauw, G, & **Hutsemekers, D.** (2012). The first X-ray survey of Galactic Luminous Blue Variables. *Astronomy and Astrophysics*, **538**, 47, pp. 1-13. <http://hdl.handle.net/2268/110808>

Payez, A, Cudell, J.-R, & **Hutsemekers, D.** (2012). New polarimetric constraints on axion-like particles. *Journal of Cosmology and Astroparticle Physics [= JCAP]*, **1207**, 041. <http://hdl.handle.net/2268/129194>

Roberge, A, Chen, C. H, Millan-Gabet, R, Weinberger, A. J, Hinz, P. M, Stapelfeldt, K. R, **Absil, O**, Kuchner, M. J, Bryden, G, & the NASA ExoPAG SAG #1, T. (2012). The Exozodiacal Dust Problem for Direct Observations of ExoEarths. *Publications of the Astronomical Society of the Pacific [=PASP]*, **124**, 799-808. <http://hdl.handle.net/2268/117966>

Rousselot, P, Jehin, E, Manfroid, J, & **Hutsemekers, D.** (2012). The 12C2/12C13C isotopic ratio in comets C/2001 Q4 (NEAT) and C/2002 T7 (LINEAR). *Astronomy and Astrophysics*, **545**, 24, pp. 1-7. <http://hdl.handle.net/2268/129998>

Shin, I.-G, Choi, J.-Y, Park, S.-Y, Han, C, Gould, A, Sumi, T, Udalski, A, Beaulieu, J.-P, Dominik, M, Allen, W, Bos, M, Christie, G. W, Depoy, D. L, Dong, S, Drummond, J, Gal-Yam, A, Gaudi, B. S, Hung, L.-W, Janczak, J, Kaspi, S, Lee, C.-U, Mallia, F, Maoz, D, Maury, A, McCormick, J, Monard, L. A. G, Moorhouse, D, Muñoz, J. A, Natusch, T, Nelson, C, Park, B.-G, Pogge, R. W, Polishook, D, Shvartzvald, Y, Shporer, A, Thornley, G, Yee, J. C, μ FUN Collaboration, Abe, F, Bennett, D. P, Bond, I. A, Botzler, C. S, Fukui, A, Furusawa, K, Hayashi, F, Hearnshaw, J. B, Hosaka, S, Itow, Y, Kamiya, K, Kilmartin, P. M, Kobara, S, Korpela, A, Lin, W, Ling, C. H, Makita, S, Masuda, K, Matsubara, Y, Miyake, N, Muraki, Y, Nagaya, M, Nishimoto, K, Ohnishi, K, Okumura, T, Omori, K, Perrott, Y. C, Rattenbury, N, Saito, T, Skuljan, L, Sullivan, D. J, Suzuki, D, Sweatman, W. L, Tristram, P. J, Wada, K, Yock, P. C. M, MOA Collaboration, **Szymański, M. K, Kubiak, M, Pietrzyński, G, Soszyński, I, Poleski, R, Ulaczyk, K, Wyrzykowski, Kozłowski, S, Pietrukowicz, P, OGLE Collaboration, Albrow, M. D, Batista, V, Bramich, D. M, Brilliant, S, Caldwell, J. A. R, Calitz, J. J, Cassan, A, Cole, A, Cook, K. H, Corrales, E, Coutures, C, Dieters, S, Dominis Prester, D, Donatowicz, J, Fouqué, P, Greenhill, J, Hoffman, M, Jørgensen, U. G, Kane, S. R, Kubas, D, Marquette, J.-B, Martin, R, Meintjes, P, Menzies, J, Pollard, K. R, Sahu, K. C, Wambsganss, J, Williams, A, Vinter, C, Zub, M, PLANET Collaboration, Allan, A, Browne, P, Horne, K, Snodgrass, C, Steele, I, Street, R, Tsapras, Y, RoboNet Collaboration, Alsubai, K. A, Bozza, V, Browne, P, Burgdorf, M. J, Calchi Novati, S, Dodds, P, Dreizler, S, **Finet, F**, Gerner, T, Glietrup, M, Grundahl, F, Hardis, S, Harpsøe, K, Hessman, F. V, Hinse, T. C, Hundertmark, M, Kains, N, Kerins, E, Liebig, C, Maier, G, Mancini, L, Mathiasen, M, Penny, M. T, Proft, S, Rahvar, S, **Ricci, D**, Scarpetta, G, Schäfer, S, Schönebeck, F, Skottfelt, J, **Surdej, J**, Southworth, J, Zimmer, F, & MiNDSTEp Consortium. (2012). Microlensing Binaries Discovered through High-magnification Channel. *Astrophysical Journal*, **746**, 127. <http://hdl.handle.net/2268/142601>**

Shin, I.-G, Han, C, Choi, J.-Y, Udalski, A, Sumi, T, Gould, A, Bozza, V, Dominik, M, Fouqué, P, Horne, K, **Szymański, M. K, Liebig, C, Lund, M, Lunkkivist, M, Mancini, L, Mathiasen, M, Penny, M. T, Rahvar, S, Ricci, D**, Scarpetta, G, Skottfelt, J, Moorhouse, D, Southworth, J, **Surdej, J**, Tregloan-Reed, J, Wambsganss, J, **Wertz, O**, MiNDSTEp Consortium, Almeida, L. A, Batista, V, Christie, G, DePoy, D. L, Natusch, T, Dong, S, Gaudi, B. S, Henderson, C, Jablonski, F, Lee, C.-U, McCormick, J, McGregor, D, Ngan, H, Park, S.-Y, Pogge, R. W, Tan, T.-G, Thornley, G, Yee, J. C, The μ FUN Collaboration, Albrow, M. D, Kubiak, M, Bachelet, E, Beaulieu, J.-P, Brilliant, S, Cassan, A, Cole, A. A, Corrales, E, **Coutures, C, Dieters, S, Dominis Prester, D, Donatowicz, J, Soszyński, I, Greenhill, J, Kubas, D, Marquette, J.-B, Menzies, J. W, Sahu, K. C, Zub, M, The PLANET Collaboration, Pietrzyński, G, Poleski, R, Ulaczyk, K, Pietrukowicz, P, Kozłowski, S, Skowron, J, Wyrzykowski, The OGLE Collaboration, Abe, F, Bennett, D. P, Bond, I. A, Botzler, C. S, Chote, P, Freeman, M, Fukui, A, Furusawa, K, Itow, Y, Kobara, S, Ling, C. H, Masuda, K, Matsubara, Y, Miyake, N, Muraki, Y, Ohmori, K, Ohnishi, K, Rattenbury, N. J, Saito, T, Sullivan, D. J, Suzuki, D, Suzuki, K, Sweatman, W. L, Takino, S, Tristram, P. J, Wada, K, Yock, P. C. M, The MOA Collaboration, Bramich, D. M, Snodgrass, C, Steele, I. A, Street, R. A, Tsapras, Y, The RoboNet Collaboration, Alsubai, K. A, Browne, P, Burgdorf, M. J, Calchi**

Novati, S, Dodds, P, Dreizler, S, Fang, X.-S, Grundahl, F, Gu, C.-H, Hardis, S, Harpsøe, K, Hinse, T. C, Hornstrup, A, Hundertmark, M, Jessen-Hansen, J, Jørgensen, U. G, Kains, N, & Kerins, E. (2012). Characterizing Low-mass Binaries from Observation of Long-timescale Caustic-crossing Gravitational Microlensing Events. *Astrophysical Journal*, **755**, 91.
<http://hdl.handle.net/2268/142597>

Shin, I.-G, Han, C, Gould, A, Udalski, A, Sumi, T, Dominik, M, Beaulieu, J.-P, Tsapras, Y, Bozza, V, **Szymański, M. K, Kubiak, M, Nagaya, M, Nishimoto, K, Ohnishi, K, Okumura, T, Omori, K, Perrott, Y.** C, Rattenbury, N, Saito, T, Skuljan, L, Sullivan, D. J, Dreizler, S, Suzuki, D, Sweatman, W. L, Tristram, P. J, Wada, K, Yock, P. C. M, The MOA Collaboration, Christie, G. W, Depoy, D. L, Dong, S, Gal-Yam, A, Fang, X.-S, Gaudi, B. S, Hung, L.-W, Janczak, J, Kaspi, S, Maoz, D, McCormick, J, McGregor, D, Moorhouse, D, Muñoz, J. A, Natusch, T, Grundahl, F, Nelson, C, Pogge, R. W, Tan, T.-G, Polishook, D, Shvartzvald, Y, Shporer, A, Thornley, G, Malamud, U, Yee, J. C, Choi, J.-Y, Gu, C.-H, Jung, Y.-K, Park, H, Lee, C.-U, Park, B.-G, Koo, J.-R, The μ FUN Collaboration, Bajek, D, Bramich, D. M, Browne, P, Horne, K, Hardis, S, Ipatov, S, Snodgrass, C, Steele, I, Street, R, Alsubai, K. A, Burgdorf, M. J, Calchi Novati, S, Dodds, P, Harpsøe, K, Hinse, T. C, Hundertmark, M, Jessen-Hansen, **J, Jørgensen, U. G, Soszyński, I, Kains, N, Kerins, E, Liebig, C, Lund, M, Lundkvist, M, Mancini, L, Mathiasen, M, Hornstrup, A, Penny, M. T, Proft, S, Pietrzyński, G, Rahvar, S, Ricci, D,** Scarpetta, G, Skottfelt, J, Southworth, J, **Surdej, J,** Tregloan-Reed, J, **Wertz, O,** Zimmer, F, Albrow, M. D, Poleski, R, Batista, V, Brilliant, S, Caldwell, J. A. R, Calitz, J. J, Cassan, A, Cole, A, Cook, K. H, Corrales, E, Coutures, C, Dieters, S, Ulaczyk, K, Dominis Prester, D, Donatowicz, J, Fouqué, P, Greenhill, J, Hill, K, Hoffman, M, Kane, S. R, Kubas, D, Marquette, J.-B, Martin, R, Pietrukowicz, P, Meintjes, P, Menzies, J, **Pollard, K. R, Sahu, K. C, Wambsganss, J, Williams, A, Vinter, C, Zub, M, Kozłowski, S, Skowron, J,** Wyrzykowski, The OGLE Collaboration, Abe, F, Bennett, D. P, Bond, I. A, Botzler, C. S, Freeman, M, Fukui, A, Furusawa, K, Hayashi, F, Hearnshaw, J. B, Hosaka, S, Itow, Y, Kamiya, K, Kilmartin, P. M, Kobara, S, Korpela, A, Lin, W, Ling, C. H, Makita, S, Masuda, K, Matsubara, Y, Miyake, N, & Muraki, Y. (2012). Microlensing Binaries with Candidate Brown Dwarf Companions. *Astrophysical Journal*, **760**, 116.
<http://hdl.handle.net/2268/142586>

Sluse, D, **Hutsemekers, D,** Courbin, F, Meylan, G, & Wambsganss, J. (2012). Microlensing of the broad line region in 17 lensed quasars. *Astronomy and Astrophysics*, **544**, 62, pp. 1-28.
<http://hdl.handle.net/2268/129197>

Southworth, J, Hinse, T. C, Dominik, M, Fang, X.-S, Harpsøe, K, Jørgensen, U. G, Kerins, E, Liebig, C, Mancini, L, Skottfelt, J, Anderson, D. R, Smalley, B, Tregloan-Reed, J, **Wertz, O,** Alsubai, K. A, Bozza, V, Calchi Novati, S, Dreizler, S, Gu, S.-H, Hundertmark, M, Jessen-Hansen, J, Kains, N, Kjeldsen, H, Lund, M. N, Lundkvist, M, Mathiasen, M, Penny, M. T, Rahvar, S, **Ricci, D,** Scarpetta, G, Snodgrass, C, & **Surdej, J.** (2012). High-precision photometry by telescope defocusing - IV. Confirmation of the huge radius of WASP-17 b. *Monthly Notices of the Royal Astronomical Society*, **426**, 1338-1348.
<http://hdl.handle.net/2268/142590>

Wertz, O, Pelgrims, V, & **Surdej, J.** (2012). Asymptotic solutions for the case of nearly symmetric gravitational lens systems. *Monthly Notices of the Royal Astronomical Society*, **424**, 1543-1555.
<http://hdl.handle.net/2268/126775>

Yee, J. C, Hung, L.-W, Bond, I. A, Allen, W, Monard, L. A. G, Albrow, M. D, Fouque, P, Dominik, M, Tsapras, Y, Udalski, A, Gould, A, Zellem, R, Bos, M, Christie, G. W, DePoy, D. L, Dong, S, Drummond, J, Gaudi, B. S, Gorbikov, E, Han, C, Kaspi, S, Klein, N, Lee, C.-U, Maoz, D, McCormick, J, Moorhouse, D, Natusch, T, Nola, M, Park, B.-G, Pogge, R. W, Polishook, D, Shporer, A, Shvartzvald, Y, Skowron, J, Thornley, G, Abe, F, Bennett, D. P, Botzler, C. S, Chote, P, Freeman, M, Fukui, A, Furusawa, K, Harris, P, Itow, Y, Ling, C. H, Masuda, K, Matsubara, Y, Miyake, N, Ohnishi, K, Rattenbury, N. J, Saito, T, Sullivan, D. J, Sumi, T, Suzuki, D, Sweatman, W. L, Tristram, P. J, Wada, K, Yock, P. C. M, Szymanski, M. K, Soszynski, I, Kubiak, M, Poleski, R, Ulaczyk, K, Pietrzynski, G, Wyrzykowski, L, Bachelet, E, Batista, V, Beatty, T. G, Beaulieu, J.-P, Bennett, C. S, Bowens-Rubin, R, Brilliant, S, Caldwell, J. A. R, Cassan, A, Cole, A. A, Corrales, E, Coutures, C, Dieters, S, Dominis Prester, D, Donatowicz, J, Greenhill, J, Henderson, C. B, Kubas, D, Marquette, J.-B, Martin, R, Menzies, J. W, Shappee, B, Williams, A, Wouters, D, van Saders, J, Zub, M, Street, R. A, Horne, K, Bramich, D. M, Steele, I. A, Alsubai, K. A, Bozza, V, Browne, P, Burgdorf, M. J, Calchi Novati, S, Dodds, P, **Finet, F,** Gerner, T, Hardis, S, Harpsøe, K, Hessman, F. V, Hinse, T. C, Hundertmark, M, Jørgensen, U. G, Kains, N, Kerins, E, Liebig, C, Mancini, L, Mathiasen, M, Penny, M. T, Proft, S, Rahvar, S, **Ricci, D,** Sahu, K. C, Scarpetta, G, Schafer, S, Schonebeck, F, Snodgrass, C, Southworth, J, **Surdej, J,** & Wambsganss, J. (2012). MOA-2010-BLG-311: A planetary candidate below the threshold of reliable detection. *ArXiv e-prints*, **1210**, 6041.
<http://hdl.handle.net/2268/142592>

Blomme, R, Nazé, Y, Volpi, D, De Becker, M, Prinja, R. K, Pittard, J. M, Parkin, E. R, & **Absil, O.** (2013). The 2.35 year itch of Cyg OB2 #9. II. Radio monitoring. *Astronomy and Astrophysics*, **550**, 90.

<http://hdl.handle.net/2268/137263>

Gould, A, Yee, J. C, Bond, I. A, Udalski, A, Han, C, Jørgensen, U. G, Greenhill, J, Tsapras, Y, Pinsonneault, M. H, Bensby, T, Allen, W, Kains, N, Kerins, E, Liebig, C, Mancini, L, Mathiasen, M, Penny, M. T, Proft, S, Rahvar, S, **Ricci, D**, Sahu, K. C, Batista, V, Scarpetta, G, Schäfer, S, Schönebeck, F, Snodgrass, C, Southworth, J, **Surdej, J**, Wambsganss, J, MiNDSTEp Consortium, T, Street, R. A, Horne, K, Beatty, T. G, Bramich, D. M, Steele, I. A, The RoboNet Collaboration, Albrow, M. D, Bachelet, E, Beaulieu, J.-P, Bennett, C. S, Bowens-Rubin, R, Brilliant, S, Caldwell, J. A. R, Cassan, A, Cole, A. A, Corrales, E, Almeida, L. A, Coutures, C, Dieters, S, Dominis Prester, D, Donatowicz, J, Fouqué, P, Henderson, C. B, Kubas, D, Marquette, J.-B, Martin, R, Menzies, J. W, Bos, M, Shappee, B, Williams, A, van Saders, J, Zub, M, The PLANET Collaboration, Christie, G. W, DePoy, D. L, Dong, S, Gaudi, B. S, Hung, L.-W, Jablonski, F, Lee, C.-U, McCormick, J, Moorhouse, D, Muñoz, J. A, Natusch, T, Nola, M, Pogge, R. W, Skowron, J, Thornley, G, The FUN Collaboration, Abe, F, Bennett, D. P, Botzler, C. S, Chote, P, Freeman, M, Fukui, A, Furusawa, K, Harris, P, Itow, Y, Ling, C. H, Masuda, K, Matsubara, Y, Miyake, N, Ohnishi, K, Rattenbury, N. J, Saito, T, Sullivan, D. J, Sumi, T, Suzuki, D, Sweatman, W. L, Tristram, P. J, Wada, K, Yock, P. C. M, The MOA Collaboration, **Szymański, M. K, Soszyński, I, Kubiak, M, Poleski, R, Ulaczyk, K, Pietrzyński, G, Wyrzykowski,** The OGLE Collaboration, Alsubai, K. A, Bozza, V, Browne, P, Burgdorf, M. J, Calchi Novati, S, Dodds, P, Dominik, M, **Finet, F**, Gerner, T, Hardis, S, Harpsøe, K, Hessman, F. V, Hinse, T. C, & Hundertmark, M. (2013). MOA-2010-BLG-523: "Failed Planet" = RS CVn Star. *Astrophysical Journal*, **763**, 141.

<http://hdl.handle.net/2268/142581>

Harpsøe, K. B. W, Hardis, S, Hinse, T. C, Jørgensen, U. G, Mancini, L, Southworth, J, Alsubai, K. A, Bozza, V, Browne, P, Burgdorf, M. J, Calchi Novati, S, Dodds, P, Dominik, M, Fang, X.-S, **Finet, F**, Gerner, T, Gu, S.-H, Hundertmark, M, Jessen-Hansen, J, Kains, N, Kerins, E, Kjeldsen, H, Liebig, C, Lund, M. N, Lundkvist, M, Mathiasen, M, Nesvorný, D, Nikolov, N, Penny, M. T, Proft, S, Rahvar, S, **Ricci, D**, Sahu, K. C, Scarpetta, G, Schäfer, S, Schönebeck, F, Snodgrass, C, Skottfelt, J, **Surdej, J**, Tregloan-Reed, J, & **Wertz, O.** (2013). The transiting system GJ1214: high-precision defocused transit observations and a search for evidence of transit timing variation. *Astronomy and Astrophysics*, **549**, 10.

<http://hdl.handle.net/2268/142584>

Mennesson, B, **Absil, O**, Lebreton, J, Augereau, J.-C, Serabyn, E, Colavita, M. M, Millan-Gabet, R, Liu, W, Hinz, P, & Thebault, P. (2013). An interferometric study of the Fomalhaut inner debris disk II. Keck Nuller mid-infrared observations. *Astrophysical Journal*, **763**, 119.

<http://hdl.handle.net/2268/135760>

Ricci, D, Elyiv, A, Finet, F, Wertz, O, Alsubai, K, Anguita, T, Bozza, V, Browne, P, Burgdorf, M, Calchi Novati, S, Dodds, P, Dominik, M, Dreizler, S, Gerner, T, Glittrup, M, Grundahl, F, Hardis, S, Harpsøe, K, Hinse, T. C, Hornstrup, A, Hundertmark, M, Jørgensen, U. G, Kains, N, Kerins, E, Liebig, C, Maier, G, Mancini, L, Masi, G, Mathiasen, M, Penny, M, Proft, S, Rahvar, S, Scarpetta, G, Sahu, K, Schäfer, S, Schönebeck, F, Schmidt, R, Skottfelt, J, Snodgrass, C, Southworth, J, Thöne, C. C, Wambsganss, J, Zimmer, F, Zub, M, & **Surdej, J.** (2013, February 01). Flux and color variations of the doubly imaged quasar UM673. *Astronomy and Astrophysics*.

<http://hdl.handle.net/2268/142573>

Street, R. A, Choi, J.-Y, Tsapras, Y, Han, C, Furusawa, K, Hundertmark, M, Gould, A, Sumi, T, Bond, I. A, Wouters, D, Zellem, R, DePoy, D. L, Gaudi, B. S, Hung, L.-W, Jablonski, F, Kaspi, S, Klein, N, Hwang, K.-H, Koo, J.-R, Maoz, D, Muñoz, J. A, Greenhill, J, Pogge, R. W, Polishhook, D, Shporer, A, McCormick, J, Christie, G, Natusch, T, Allen, B, Drummond, J, Moorhouse, D, Thornley, G, Kane, S. R, Knowler, M, Bos, M, Bolt, G, The PLANET Collaboration, Beaulieu, J.-P, Albrow, M. D, Batista, V, Brilliant, S, Caldwell, J. A. R, Cassan, A, Kubas, D, Cole, A, Corrales, E, Coutures, C, Dieters, S, Dominis Prester, D, Donatowicz, J, Fouqué, P, Bachelet, E, Marquette, J.-B, Martin, R, Menzies, J, Pollard, K. R, Sahu, K. C, Wambsganss, J, Williams, A, Udalski, A, Zub, M, MiNDSTEp, Alsubai, K. A, Bozza, V, Burgdorf, M. J, Calchi Novati, S, Dodds, P, Dreizler, S, **Finet, F**, Gerner, T, The RoboNet Collaboration, Hardis, S, Harpsøe, K, Hessman, F, Hinse, T. C, Jørgensen, U. G, Kerins, E, Liebig, C, Mancini, L, Mathiasen, M, Penny, M. T, Snodgrass, C, Proft, S, Rahvar, S, **Ricci, D**, Scarpetta, G, Schäfer, S, Schönebeck, F, Southworth, J, **Surdej, J**, et al. (2013). MOA-2010-BLG-073L: An M-dwarf with a Substellar Companion at the Planet/Brown Dwarf Boundary. *Astrophysical Journal*, **763**, 67.

<http://hdl.handle.net/2268/142582>

Fundamental Interactions in Physics and Astrophysics

- Adrian-Martinez, S, & **Meli, A.** (2012). A First Search for coincident Gravitational Waves and High Energy Neutrinos using LIGO, Virgo and ANTARES data from 2007. *Physics Letters A*. <http://hdl.handle.net/2268/138617>
- Adrian-Martinez, S, & **Meli, A.** (2012). Measurement of the Group Velocity of Light in Sea Water at the ANTARES Site. *Astropart.Phys*, **35**, 552-557. <http://hdl.handle.net/2268/138622>
- Adrian-Martinez, S, & **Meli, A.** (2012). Search for Cosmic Neutrino Point Sources with Four Year Data of the ANTARES Telescope. *Astrophys.J*, **760**, 53. <http://hdl.handle.net/2268/138611>
- Ageron,, M, & **Meli, A.** (2012). The ANTARES telescope neutrino alert system. *Astroparticle Physics*. <http://hdl.handle.net/2268/112645>
- Aguilar, J. A, Al Samarai, I, Anghinolfi, M, & **Meli, A.** (2012). A method for detection of muon induced electromagnetic showers with the ANTARES detector. *Nucl.Instrum.Meth*, **A675**, 56-62. <http://hdl.handle.net/2268/138625>
- Aristizabal Sierra, D, Degée, A,** & Kamenik, J. F. (2012). Minimal Lepton Flavor Violating Realizations of Minimal Seesaw Models. *Journal of High Energy Physics [=JHEP]*, **JHEP 1207 (2012) 135**(2012), 135-156. <http://hdl.handle.net/2268/137014>
- Aristizabal Sierra, D,** & Bazzocchi, F. (2012, March). Leptogenesis in the presence of exact flavor symmetries. *Journal of High Energy Physics [=JHEP]*. <http://hdl.handle.net/2268/138420>
- Aristizabal Sierra, D,** & De Medeiros Varzielas, I. (2012, October). The role of lepton flavor symmetries in leptogenesis. *Fortschritte der Physik = Progress of Physics*. <http://hdl.handle.net/2268/138461>
- Aristizabal Sierra, D,** Bazzocchi, F, & de Medeiros Varzielas, I. (2012, May). Leptogenesis in flavor models with type I and II seesaws. *Nuclear Physics B*. <http://hdl.handle.net/2268/138436>
- Bacchetta, A, **Courtoy, A,** & Radici, M. (2012). First extraction of valence transversities in a collinear framework. *arXiv*, *arXiv:1212.3568*. <http://hdl.handle.net/2268/138009>
- Courtoy, A,** Bacchetta, A, & Radici, M. (2012). Interference Fragmentation Functions and Transverse Spin Studies. *C12-03-26.1, DIS2012*. <http://hdl.handle.net/2268/137995>
- Courtoy, A,** Bacchetta, A, & Radici, M. (2012). Status on the transversity parton distribution: the dihadron fragmentation functions way. *PoS, QNP2012*, 042. <http://hdl.handle.net/2268/137989>
- Courtoy, A,** Bacchetta, A, Radici, M, & Bianconi, A. (2012). First extraction of interference fragmentation functions from e+e- data. *Physical Review D - Particles, Fields, Gravitation and Cosmology*, **85**(11). <http://hdl.handle.net/2268/127183>

- Cudell, J.-R.**, Dechambre, A, & Henandez, O. F. (2012). Higgs Central Exclusive Production. *Physics Letters B*, 706, 333-339.
<http://hdl.handle.net/2268/126605>
- Cudell, J.-R.**, Lansberg, J.-P, & Mancusi, D. (Eds.). (2012). *30 Years of Strong Interactions: a Three-Day Meeting in Honour of Joseph Cugnon and Hans-Jürgen Pirner*. Springer.
<http://hdl.handle.net/2268/126308>
- Cugnon, J.** (2012). The Casimir effect and the vacuum energy. *Few-Body Systems*, 53(1-2), 181-188.
<http://hdl.handle.net/2268/137507>
- Cugnon, J.** (2012). A short introduction to spallation reactions. *Few-Body Systems*, 53(1-2), 142-152.
<http://hdl.handle.net/2268/137505>
- Degée, A.** (2012). Minimal seesaw models and minimal lepton flavor violation. *Frascati Physics Series Vol. LIV, Frascati Phys.Ser.* 55(2012), 31-36.
<http://hdl.handle.net/2268/135181>
- Ivanov, I.** & Vdovin, E. (2012). Discrete symmetries in the three-Higgs-doublet model. *Physical Review. D : Particles and Fields*, 86(9), 095030 (5).
<http://hdl.handle.net/2268/136445>
- Ivanov, I.** & Keus, V. (2012). Z_p scalar dark matter from multi-Higgs-doublet models. *Physical Review. D : Particles and Fields*, 86(1), 016004 (7).
<http://hdl.handle.net/2268/118728>
- Ivanov, I.** (2012). Measuring the phase of the scattering amplitude with vortex beams. *Physical Review. D : Particles and Fields*, 85(7), 076001 (10).
<http://hdl.handle.net/2268/136447>
- Ivanov, I.** (2012). Creation of two vortex-entangled beams in a vortex-beam collision with a plane wave. *Physical Review. A : General Physics*, 85(3), 033813 1-4.
<http://hdl.handle.net/2268/117071>
- Ivanov, I.**, Keus, V, & Vdovin, E. (2012). Abelian symmetries in multi-Higgs-doublet models. *Journal of Mathematical Physics*.
<http://hdl.handle.net/2268/123724>
- Lansberg, J.-P, Pire, B, **Semenov-Tyan-Shanskiy, K.** & Szymanowski, L. (2012). Accessing baryon to meson transition distribution amplitudes in meson production in association with a high invariant mass lepton pair at GSI-FAIR with PANDA. *Physical Review. D : Particles and Fields*, 86, 114033.
<http://hdl.handle.net/2268/137410>
- Lansberg, J.-P, Pire, B, **Semenov-Tian-Chanski, K.** & Szymanowski, L. (2012). Consistent model for πN transition distribution amplitudes and backward pion electroproduction. *Physical Review. D : Particles and Fields*, 85, 054021.
<http://hdl.handle.net/2268/116396>
- Matagne, N, & **Stancu, F.** (2012). Negative parity baryons in the $1/N_c$ expansion: the three towers of states revisited. *Physical Review. D : Particles and Fields*, D86, 076007.
<http://hdl.handle.net/2268/137526>
- Matagne, N, & **Stancu, F.** (2012). Highly excited negative parity baryons in the $1/N_c$ expansion. *Physical Review. D : Particles and Fields*, D85, 116003.
<http://hdl.handle.net/2268/137519>
- Matagne, N, & **Stancu, F.** (2012). Highly excited states of baryons in large N_c QCD. Bled Workshops in Physics, 13(1), 47-53
<http://hdl.handle.net/2268/137698>
- Meli, A.** (2012). Diffusive and shock-drift acceleration in relativistic shocks. *Few Body Syst*, 53, 157-165.
<http://hdl.handle.net/2268/138634>
- Meli, A.** (2012). Diffusive and shock-drift acceleration in relativistic shocks. *Few Body Syst*, 53, 157-165.
<http://hdl.handle.net/2268/138609>

Meli, A. & Biermann, P. L. (2012). Active Galactic Nuclei Jets and Multiple Oblique Shock Acceleration: Starved Spectra. *Astroparticle Physics*.
<http://hdl.handle.net/2268/138608>

Meli, A. & Biermann, P. L. (2012). UHECRs and multiple shock acceleration in Active Galactic Nuclei jets. *J.Phys.Conf.Ser*, **375**, 052016.
<http://hdl.handle.net/2268/138636>

Meli, A. & Biermann, P. L. (2012). UHECRs and multiple shock acceleration in Active Galactic Nuclei jets. *J.Phys.Conf.Ser*, **375**, 052016
<http://hdl.handle.net/2268/138605>

Payez, A, Cudell, J.-R, & Hutsemekers, D. (2012). New polarimetric constraints on axion-like particles. *Journal of Cosmology and Astroparticle Physics [= JCAP]*, **1207**, 041
<http://hdl.handle.net/2268/129194>

Payez, A. (2012). Cornering the axionlike particle explanation of quasar polarizations. *Physical Review. D : Particles and Fields*, **85**(8), 087701.
<http://hdl.handle.net/2268/131073>

Nazé, Y, Rauw, G, & **Hutsemekers, D.** (2012). The first X-ray survey of Galactic Luminous Blue Variables. *Astronomy and Astrophysics*, **538**, 47, pp. 1-13.
<http://hdl.handle.net/2268/110808>

Wertz, O, **Pelgrims, V**, & Surdej, J. (2012). Asymptotic solutions for the case of nearly symmetric gravitational lens systems. *Monthly Notices of the Royal Astronomical Society*, **424**, 1543-1555.
<http://hdl.handle.net/2268/126775>

GeoHydrodynamics and Environment Research

Troupin, C, **Barth, A**, Sirjacobs, D, **Ouberdous, M**, Brankart, J.-M, Brasseur, P, Rixen, M, **Alvera Azcarate, A**, Belounis, M, Capet, A, Lenartz, F, Toussaint, M.-E, & **Beckers, J.-M**. (2012). Generation of analysis and consistent error fields using the Data Interpolating Variational Analysis (Diva). *Ocean Modelling*, 52-53, 90-101.

<http://hdl.handle.net/2268/125731>

Alvera Azcarate, A, Sirjacobs, D, **Barth, A**, & **Beckers, J.-M**. (2012). Outlier detection in satellite data using spatial coherence. *Remote Sensing of Environment*, 119, 84-91.

<http://hdl.handle.net/2268/112582>

Capet, A, **Barth, A**, **Beckers, J.-M**, & Grégoire, M. (2012). Interannual variability of Black Sea's hydrodynamics and connection to atmospheric patterns. *Deep-Sea Research Part II, Topical Studies in Oceanography*.

<http://hdl.handle.net/2268/126677>

Troupin, C, Mason, E, **Beckers, J.-M**, & Sangrà, P. (2012). Generation of the Cape Ghir upwelling filament: A numerical study. *Ocean Modelling*, 41, 1-15.

<http://hdl.handle.net/2268/100143>

Tyberghein, L, Verbruggen, H, Klaas, P, **Troupin, C**, Mineur, F, & De Clerck, O. (2012). ORACLE: a global environmental dataset for marine species distribution modeling. *Global Ecology & Biogeography*, 21(2), 272-281.

<http://hdl.handle.net/2268/112937>

Beckers, J.-M. (2012). Les énergies marines. *Bulletin de la Société Royale des Sciences de Liège*, 81, 155.

<http://hdl.handle.net/2268/137694>

High-Energy Astrophysics Group

Briquet, M, Neiner, C, Aerts, C, **Morel, T**, Mathis, S, Reese, D, Lehmann, H, Costero, R, Echevarria, J, Handler, G, Kambe, E, Hirata, R, Masuda, S, Wright, D, Yang, S, Pintado, O, Mkrtichian, D, Lee, B. C, Han, I, Bruch, A, De Cat, P, Uytterhoeven, K, Lefever, K, Vanautgaerden, J, de Batz, B, Frémat, Y, Henrichs, H, Geers, V. C, Martayan, C, Hubert, A. M, Thizy, O, & Tijani, A. (2012). Multisite spectroscopic seismic study of the β Cep star V2052 Ophiuchi: inhibition of mixing by its magnetic field. *Monthly Notices of the Royal Astronomical Society*, **427**, 483-493.

den Herder, J.-W, Piro, L, Ohashi, T, Kouveliotou, C, Hartmann, D. H, Kaastra, J. S, Amati, L, Andersen, M. I, Arnaud, M, Attéia, J.-L, Bandler, S, Barbera, M, Barcons, X, Barthelmy, S, Basa, S, Basso, S, Boer, M, Branchini, E, Branduardi-Raymont, G, Borgani, S, Boyarsky, A, Brunetti, G, Budtz-Jorgensen, C, Burrows, D, Butler, N, Campana, S, Caroli, E, Ceballos, M, Christensen, F, Churazov, E, Comastri, A, Colasanti, L, Cole, R, Content, R, Corsi, A, Costantini, E, Conconi, P, Cusumano, G, de Plaa, J, De Rosa, A, Del Santo, M, Di Cosimo, S, De Pasquale, M, Doriese, R, Etori, S, Evans, P, Ezoe, Y, Ferrari, L, Finger, H, Figueroa-Feliciano, T, Friedrich, P, Fujimoto, R, Furuzawa, A, Fynbo, J, Gatti, F, Galeazzi, M, Gehrels, N, Gendre, B, Ghirlanda, G, Ghisellini, G, Gilfanov, M, Giommi, P, Girardi, M, Grindlay, J, Cocchi, M, Godet, O, Guedel, M, Haardt, F, den Hartog, R, Hepburn, I, Hermsen, W, **Hjorth, J, Hoekstra, H, Holland, A, Hornstrup, A, van der Horst, A, Hoshino, A, in't Zand, J**, Irwin, K, Ishisaki, Y, Jonker, P, Kitayama, T, Kawahara, H, Kawai, N, Kelley, R, Kilbourne, C, de Korte, P, Kusenko, A, Kuvvetli, I, Labanti, M, Macculi, C, Maiolino, R, Hesse, M. M, Matsushita, K, Mazzotta, P, McCammon, D, Méndez, M, Mignani, R, Mineo, T, Mitsuda, K, Mushotzky, R, Molendi, S, Moscardini, L, **Natalucci, L, Nicastro, F, O'Brien, P, Osborne, J, Paerels, F, Page, M, Paltani, S, Pedersen, K, Perinati, E**, Ponman, T, Pointecouteau, E, Predehl, P, Porter, S, Rasmussen, A, **Rauw, G**, Röttgering, H, Roncarelli, M, Rosati, P, Quadri, E, Ruchayskiy, O, Salvaterra, R, Sasaki, S, Sato, K, Savaglio, S, Schaye, J, Sciortino, S, Shaposhnikov, M, Sharples, R, Shinozaki, K, Spiga, D, Sunyaev, R, Suto, Y, Takei, Y, Tanvir, N, Tashiro, M, Tamura, T, Tawara, Y, Troja, E, Tsujimoto, M, Tsuru, T, Ubertini, P, Ullom, J, Ursino, E, Verbunt, F, van de Voort, F, Viel, M, Wachter, S, Watson, D, Weisskopf, M, Werner, N, White, N, Willingale, R, Wijers, R, Yamasaki, N, Yoshikawa, K, & Zane, S. (2012). ORIGIN: metal creation and evolution from the cosmic dawn. *Experimental Astronomy*, **34**, 519-549.

Nazé, Y, Mahy, L, Damerджи, Y, Kobulnicky, H. A, Pittard, J. M, Parkin, E. R, Absil, O, & Blomme, R. (2012). The 2.35 year itch of Cygnus OB2 #9. I. Optical and X-ray monitoring. *Astronomy and Astrophysics*, **546**, 37.

Rauw, G, Morel, T, & Palate, M. (2012). The nature of the high Galactic latitude O-star HD 93521: new results from X-ray and optical spectroscopy. *Astronomy and Astrophysics*, **546**, 77.

Rousselot, P, Jehin, E, **Manfroid, J**, & Hutsemekers, D. (2012). The 12C2/12C13C isotopic ratio in comets C/2001 Q4 (NEAT) and C/2002 T7 (LINEAR). *Astronomy and Astrophysics*, **545**, 24, pp. 1-7.

Wade, G. A, Maíz Apellániz, J, Martins, F, Petit, V, Grunhut, J, Walborn, N. R, Barbá, R. H, Gagné, M, García-Melendo, E, Jose, J, Moffat, A. F. J, **Nazé, Y**, Neiner, C, Pellerin, A, Penadés Ordaz, M, Shultz, M, Simón-Díaz, S, & Sota, A. (2012). NGC 1624-2: a slowly rotating, X-ray luminous Of?p star with an extraordinarily strong magnetic field. *Monthly Notices of the Royal Astronomical Society*, **425**, 1278-1293.

Nazé, Y, Bagnulo, S, Petit, V, Rivinius, T, Wade, G, **Rauw, G**, & Gagné, M. (2012). Magnetometry of a sample of massive stars in Carina. *Monthly Notices of the Royal Astronomical Society*, **423**, 3413-3419.

Sana, H, de Mink, S. E, de Koter, A, Langer, N, Evans, C. J, Gieles, M, **Gosset, E**, Izzard, R. G, Le Bouquin, J.-B, & Schneider, F. R. N. (2012). Binary Interaction Dominates the Evolution of Massive Stars. *Science*, **337**, 444.

De Becker, M, Sana, H, Absil, O, Le Bouquin, J.-B, & Blomme, R. (2012). The long period eccentric orbit of the particle accelerator HD167971 revealed by long baseline interferometry. *Monthly Notices of the Royal Astronomical Society*, **423**, 2711-2717.

Rauw, G, Sana, H, Spano, M, **Gosset, E**, **Mahy, L**, **De Becker, M**, & Eenens, P. (2012). 9 Sagittarii: uncovering an O-type spectroscopic binary with an 8.6 year period. *Astronomy and Astrophysics*, **542**, 95.

Salmon, S, Montalbán Iglesias, J, **Morel, T**, Miglio, A, Dupret, M.-A, & Noels-Grötsch, A. (2012). Testing the effects of opacity and the chemical mixture on the excitation of pulsations in B stars of the Magellanic Clouds. *Monthly Notices of the Royal Astronomical Society*, **422**, 3460-3474.

Degroote, P, Aerts, C, Michel, E, Briquet, M, Pápics, P.I, Amado, P, Mathias, P, Poretti, E, Rainer, M, Lombaert, R, Hillen, M, **Morel, T**, Auvergne, M, Baglin, A, Baudin, F, Catala, C, & Samadi, R. (2012). The CoRoT B-type binary HD50230: a prototypical hybrid pulsator with g-mode period and p-mode frequency spacings. *Astronomy and Astrophysics*, **542**, 88.

Linder, N, **Rauw, G**, Sana, H, **De Becker, M**, & **Gosset, E**. (2012). The Struve-Sahade effect in the optical spectra of O-type binaries. I. Main-sequence systems (Corrigendum). *Astronomy and Astrophysics*, **541**, 2.

Marcolino, W. L. F, Bouret, J.-C, Walborn, N. R, Howarth, I. D, **Nazé, Y**, Fullerton, A. W, Wade, G. A, Hillier, D. J, & Herrero, A. (2012). HST/STIS spectroscopy of the magnetic Of?p star HD 108: the low state at ultraviolet wavelengths. *Monthly Notices of the Royal Astronomical Society*, **422**, 2314-2321.

Poels, J, Borra, E, Hickson, P, Ram Sagar, Bartczak, P, Delchambre, L, Finet, F, **Swings, J.-P**, & Surdej, J. (2012). The International Liquid Mirror Telescope (ILMT) as a Variability Time Machine. In E., Griffin (Ed.), *New Horizons In Time-Domain Astronomy*, *IAU Symposium No. 285*, 2011. International Astronomical Union.

Hervé, A, **Rauw, G**, **Nazé, Y**, & Foster, A. (2012). Global Modeling of X-Ray Spectra Produced in O-type Star Winds. *Astrophysical Journal*, **748**, 89.

Mahy, L, **Gosset, E**, Sana, H, Damerdjji, Y, **De Becker, M**, **Rauw, G**, & Nitschelm, C. (2012). Evidence for a physically bound third component in HD 150136. *Astronomy and Astrophysics*, **540**, 97.

Le Coroller, H, Dejonghe, J, Regal, X, Sottile, R, Mourard, D, Ricci, D, Lardiere, O, Le Vansuu, A, Boer, M, **De Becker, M**, Clause, J.-M, Guillaume, C, & Meunier, J.-P. (2012). Tests with a Carlina-type diluted telescope. Primary coherencing. *Astronomy and Astrophysics*, **539**, 59.

Baudin, F, Barban, C, Goupil, M. J, Samadi, R, Lebreton, Y, Bruntt, H, **Morel, T**, Lefèvre, L, Michel, E, Mosser, B, Carrier, F, De Ridder, J, Hatzes, A, Hekker, S, Kallinger, T, Auvergne, M, Baglin, A, & Catala, C. (2012). Modelling a high-mass red giant observed by CoRoT. *Astronomy and Astrophysics*, **538**, 73.

Martins, F, **Mahy, L**, Hillier, D. J, & **Rauw, G**. (2012). A quantitative study of O stars in NGC 2244 and the Monoceros OB2 association. *Astronomy and Astrophysics*, **538**, 39 (15).

Nazé, Y, Zhekov, S.A, & Foster, A. (2012). High-resolution X-ray spectroscopy of the magnetic Of?p star HD148937. *Astrophysical Journal*, **746**, 142.

Nazé, Y, Flores, C. A, & **Rauw, G**. (2012). A detailed X-ray investigation of ζ Puppis. I. The dataset and some preliminary results. *Astronomy and Astrophysics*, **538**, 22 (9).

Nazé, Y, **Rauw, G**, & Hutsemekers, D. (2012). The first X-ray survey of Galactic Luminous Blue Variables. *Astronomy and Astrophysics*, **538**, 47, pp. 1-13.

Carry, B, Vernazza, P, Dumas, C, Merline, W. J, Mousis, O, Rousselot, P, Jehin, E, **Manfroid, J**, Fulchignoni, M, & Zucconi, J.-M. (2012). The remarkable surface homogeneity of the Dawn mission target (1) Ceres. *Icarus*, **217**, 20-26.

Elyiv, A, Clerc, N, Plionis, M, Surdej, J, Pierre, M, Basilakos, S, Chiappetti, L, Gandhi, P, **Gosset, E**, Melnyk, O, & Pacaud, F. (2012). Angular correlation functions of X-ray point-like sources in the full exposure XMM-LSS field. *Astronomy and Astrophysics*, **537**, 131.

Morel, T, & Miglio, A. (2012). Assessing the accuracy of the surface gravity determination in late-type stars with solar-like pulsators. *Monthly Notices of the Royal Astronomical Society*, **419**, 34-L38.

Palate, M, & **Rauw, G**. (2012). Spectral modelling of circular massive binary systems. Towards an understanding of the Struve-Sahade effect? *Astronomy and Astrophysics*, **537**, 119.

Wade, G. A, Grunhut, J, Gräfener, G, Howarth, I. D, Martins, F, Petit, V, Vink, J. S, Bagnulo, S, Folsom, C. P, **Nazé, Y**, Walborn, N. R, Townsend, R. H. D, & Evans, C. J. (2012). The spectral variability and magnetic field characteristics of the Of?p star HD 148937. *Monthly Notices of the Royal Astronomical Society*, **419**, 2459-2471.

Pápics, P. I, Briquet, M, Baglin, A, Poretti, E, Aerts, C, Degroote, P, Tkachenko, A, **Morel, T**, Zima, W, Niemczura, E, Rainer, M, Hareter, M, Baudin, F, Catala, C, Samadi, R, Auvergne, M, & Michel, E. (2012). Gravitational and pressure modes detected in the B3 IV CoRoT target HD 43317. *Astronomy and Astrophysics*, **542**, 55.

Puls, J, Leitherer, C, Owocki, S, Crowther, P, Hanson, M, Herrero, A, Langer, N, Owocki, S, **Rauw, G**, St-Louis, N, & Townsend, R. (2012). Division IV / Working Group on Massive Stars. *Transactions of the International Astronomical Union, Series B*, **28**, 207-210.

Nazé, Y. (2012). *Cahier d'exploration du ciel I. découvrir l'Univers (réédition cahier 2009)*. Réjouissiences.

Nazé, Y. (2012). *Cahier d'exploration du ciel II. Mesurer l'Univers*. Réjouissiences.

Nazé, Y. (2012). *La cuisine du Cosmos. Traité de (G)astronomie*. Réjouissiences.

den Herder, J. W, Bagnali, D, Bandler, S, Barbera, M, Barcons, X, Barret, D, Bastia, P, Bisotti, M, Boyce, K, Cara, C, Ceballos, M, Corcione, L, Cobo, B, Colasanti, L, de Plaa, J, DiPirro, M, Doriese, W, B, Ezoë, Y, Fujimoto, R, Gatti, F, Gottardi, L, Guttridge, P, den Hartog, R, Hepburn, I, Kelley, R, Irwin, K, Ishisaki, Y, Kilbourne, C, de Korte, P. A. J, van der Kuur, J, Lotti, S, Macculi, C, Mitsuda, K, Mineo, T, Natalucci, L, Ohashi, T, Page, M, Paltani, S, Perinati, E, Piro, L, Pigot, C, Porter, F. S, **Rauw, G**, Ravera, L, Renotte, E, Sauvageot, J.-L, Schmid, C, Sciortino, S, Shirron, P, Takei, Y, Torrioli, G, Tsujimoto, M, Valenziano, L, Willingale, D, de Vries, C, van Weers, H, Wilms, J, & Yamasaki, N. Y. (2012). The x-ray microcalorimeter spectrometer onboard Athena. *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, 8443, 84432B-84432B-12

Damerджи, Y, **Morel, T, & Gosset, E.** (2012). Spectroscopic binary processing within Gaia DPAC. *Orbital Couples: Pas de Deux in the Solar System and the Milky Way* (pp. 71-75).

Miglio, A, **Morel, T**, Barbieri, M, Mosser, B, Girardi, L, Montalbán Iglesias, J, & Valentini, M. (2012). Solar-like pulsating stars as distance indicators: G-K giants in the CoRoT and Kepler fields. *European Physical Journal Web of Conferences* (pp. 05012).

Rousselot, P, Pirali, O, Jehin, E, Vervloet, M, Hutsemekers, D, **Manfroid, J**, Martin-Drumel, M, Gruet, S, & Lobanova, M. (2012). A Search For 15NH₂ Lines In Comet C/2002 T7 (LINEAR). *Bulletin of the American Astronomical Society*, **44**, 314.14.

Hubrig, S, Schöller, M, Ilyin, I, Briquet, M, **Morel, T**, De Cat, P, Takata, M, & Lynas-Gray, A. E. (2012). First Magnetic Field Models for Recently Discovered Magnetic β Cephei and Slowly Pulsating B Stars. *Progress in Solar/Stellar Physics with Helio- and Asteroseismology* (pp. 307).

Hololab

Delacroix, C, Forsberg, P, Karlsson, M, Mawet, D, Absil, O, Hanot, C, Surdej, J, & **Habraken, S**. (2012). Design, manufacturing, and performance analysis of mid-infrared achromatic half-wave plates with diamond subwavelength gratings. *Applied Optics*, *51*, 5897.
<http://hdl.handle.net/2268/131602>

In press

Languy, F, LENAERTS, E, Loicq, J, Thibert, T, & **Habraken, S**. (2013). Performance of solar concentrator made of an achromatic Fresnel doublet measured with a continuous solar simulator and comparison with a singlet. *Solar Energy Materials & Solar Cells*, *190*, 70-76.
<http://hdl.handle.net/2268/134540>

Theoretical Stellar Astrophysics and Asteroseismology

Baran, A. S, Reed, M. D, Stello, D, Ostensen, R. H, Telting, J. H, Pakstiene, E. M, O'Toole, S. J, Silvotti, R, Degroote, P, Bloemen, S, Hu, H, **Van Grootel, V**, Clarke, B. D, Van Cleve, J, Thompson, S. E, & Kawaler, S. D. (2012). A pulsation zoo in the hot subdwarf B star KIC 10139564 observed by Kepler. *Monthly Notices of the Royal Astronomical Society*, **424**, 2686.
<http://hdl.handle.net/2268/132256>

Bazot, M, Campante, T. L, Chaplin, W. J, Carfantan, H, Bedding, T. R, Dumusque, X, Broomhall, A. M, Petit, P, Théado, S, **Van Grootel, V**, Arentoft, T, Castro, M, Christensen-Dalsgaard, J, do Nascimento, J.-D, Dintrans, B, Kjeldsen, H, Monteiro, M. J. P. F. G, Santos, N. C, Sousa, S. O, & Vauclair, S. (2012). Estimating the p-mode frequencies of the solar twin 18 Scorpii. *Astronomy and Astrophysics*, **544**, 106.
<http://hdl.handle.net/2268/132265>

Belkacem, K, **Dupret, M.-A.**, Baudin, F, Appourchaux, T, Marques, J. P, & Samadi, R. (2012). Damping rates of solar-like oscillations across the HR diagram. Theoretical calculations confronted to CoRoT and Kepler observations. *Astronomy and Astrophysics*, **540**, 7.
<http://hdl.handle.net/2268/140189>

Beck, P. G, **Montalban Iglesias, J**, Kallinger, T, De Ridder, J, Aerts, C, García, R. A, Hekker, S, **Dupret, M.-A.**, Mosser, B, Eggenberger, P, Stello, D, Elsworth, Y, Frandsen, S, Carrier, F, Hillen, M, Gruberbauer, M, Christensen-Dalsgaard, J, Miglio, A, **Valentini, M**, Bedding, T. R, Kjeldsen, H, Girouard, F. R, Hall, J. R, & Ibrahim, K. A. (2012). Fast core rotation in red-giant stars as revealed by gravity-dominated mixed modes. *Nature*, **481**, 55-57.
<http://hdl.handle.net/2268/107458>

Briquet, M, Neiner, C, Aerts, C, Morel, T, Mathis, S, **Reese, D**, Lehmann, H, Costero, R, Echevarria, J, Handler, G, Kambe, E, Hirata, R, Masuda, S, Wright, D, Yang, S, Pintado, O, Mkrtichian, D, Lee, B. C, Han, I, Bruch, A, De Cat, P, Uytterhoeven, K, Lefever, K, Vanautgaerden, J, de Batz, B, Frémat, Y, Henrichs, H, Geers, V. C, Martayan, C, Hubert, A. M, Thizy, O, & Tijani, A. (2012). Multisite spectroscopic seismic study of the β Cep star V2052 Ophiuchi: inhibition of mixing by its magnetic field. *Monthly Notices of the Royal Astronomical Society*, **427**, 483-493.
<http://hdl.handle.net/2268/140267>

Degroote, P, Aerts, C, Michel, E, **Briquet, M**, Papics, P. I, Amado, P, Mathias, P, Poretti, E, Rainer, M, Lombaert, R, Hillen, M, Morel, T, Auvergne, M, Baglin, A, Baudin, F, Catala, C, & Samadi, R. (2012). The CoRoT B-type binary HD 50230: a prototypical hybrid pulsator with g-mode period and p-mode frequency spacings*. *Astronomy and Astrophysics*, **542**, 88.
<http://hdl.handle.net/2268/132496>

Deheuvels, S, García, R. A, Chaplin, W. J, Basu, S, Antia, H. M, Appourchaux, T, Benomar, O, Davies, G. R, Elsworth, Y, Gizon, L, Goupil, M. J, **Reese, D**, Regulo, C, Schou, J, Stahn, T, Casagrande, L, Christensen-Dalsgaard, J, Fischer, D, Hekker, S, Kjeldsen, H, Mathur, S, Mosser, B, Pinsonneault, M, Valenti, J, Christiansen, J. L, Kinemuchi, K, & Mullally, F. (2012). Seismic Evidence for a Rapidly Rotating Core in a Lower-giant-branch Star Observed with Kepler. *Astrophysical Journal*, **756**, 19.
<http://hdl.handle.net/2268/139444>

Eggenberger, P, **Montalban Iglesias, J**, & Miglio, A. (2012). Angular momentum transport in stellar interiors constrained by rotational splittings of mixed modes in red giants. *Astronomy and Astrophysics*, **544**, 4.
<http://hdl.handle.net/2268/130354>

Fontaine, G, Brassard, P, Charpinet, S, Green, E. M, Randall, S. K, & **Van Grootel, V.** (2012). A preliminary look at the empirical mass distribution of hot B subdwarf stars. *Astronomy and Astrophysics*, 539, 12.

<http://hdl.handle.net/2268/108797>

Grigahcène, A, **Dupret, M.-A.** Sousa, S. G, Monteiro, M. J. P. F. G, Garrido, R, **Scuflaire, R,** & **Gabriel, M.** (2012). Towards an effective asteroseismology of solar-like stars: time-dependent convection effects on pulsation frequencies. *Monthly Notices of the Royal Astronomical Society*, 422, 43.

<http://hdl.handle.net/2268/140183>

Handler, G, Shobbrook, R. R, Uytterhoeven, K, **Briquet, M,** Neiner, C, Tshenye, T, Ngwato, B, van Winckel, H, Guggenberger, E, Raskin, G, Rodríguez, E, Mazumdar, A, Barban, C, Lorenz, D, **Vandenbussche, B,** **Şahin, T,** **Medupe, R,** & Aerts, C. (2012). A multisite photometric study of two unusual β Cep stars: the magnetic V2052 Oph and the massive rapid rotator V986 Oph. *Monthly Notices of the Royal Astronomical Society*, 424, 2380-2391.

<http://hdl.handle.net/2268/132491>

Hubrig, S, González, J. F, Ilyin, I, Korhonen, H, Schöller, M, Savanov, I, Arlt, R, Castelli, F, Lo Curto, G, **Briquet, M,** & Dall, T. H. (2012). Magnetic fields of HgMn stars. *Astronomy and Astrophysics*, 547, 90.

<http://hdl.handle.net/2268/140435>

Miglio, A, Brogaard, K, Stello, D, Chaplin, W. J, D'Antona, F, **Montalban Iglesias, J,** Basu, S, Bressan, A, Grundahl, F, Pinsonneault, M, Serenelli, A. M, Elsworth, Y, Hekker, S, Kallinger, T, Mosser, B, Ventura, P, Bonanno, A, **Noels-Grötsch, A,** Silva Aguirre, V, Szabo, R, Li, J, McCauliff, S, Middour, C. K, & Kjeldsen, H. (2012). Asteroseismology of old open clusters with Kepler: direct estimate of the integrated red giant branch mass-loss in NGC 6791 and 6819. *Monthly Notices of the Royal Astronomical Society*, 419, 2077-2088.

<http://hdl.handle.net/2268/130359>

Miglio, A, **Montalban Iglesias, J,** & **Noels-Grötsch, A.** (2012). Red Giants as Probes of the Structure and Evolution of the Milky Way. *Red Giants as Probes of the Structure and Evolution of the Milky Way*.

<http://hdl.handle.net/2268/130362>

Montalban Iglesias, J, Miglio, A, **Noels-Grötsch, A,** **Scuflaire, R,** Ventura, P, & D'Antona, F. (2012). Adiabatic Solar-Like Oscillations in Red Giant Stars. *Red Giants as Probes of the Structure and Evolution of the Milky Way* (pp. 23). Springer.

<http://hdl.handle.net/2268/130361>

Morgenthaler, A, Petit, P, Saar, S, Solanki, S. K, Auriere, M, Dintrans, B, Farès, R, Gastine, T, Lanoux, J, Lignieres, F, Marsden, S. C, Morin, J, Paletou, F, Ramirez Velez, J. C, Theado, S, & **Van Grootel, V.** (2012). Long-term magnetic field monitoring of the Sun-like star ξ Bootis A. *Astronomy and Astrophysics*, 540, 138.

<http://hdl.handle.net/2268/117528>

Neiner, C, Floquet, M, Samadi, R, Espinosa Lara, F, Frémat, Y, Mathis, S, de Batz, B, Rainer, M, Poretti, E, Mathias, P, Guarro Fló, J, Buil, C, Ribeiro, J, Alecian, E, Andrade, L, **Briquet, M,** Diago, P, D, Emilio, M, Fabregat, J, Gutiérrez-Soto, J, Hubert, A.-M, Janot-Pacheco, E, Martayan, C, Semaan, T, Suso, J, Zorec, J, & Leroy, B. (2012). Stochastic gravito-inertial modes discovered by CoRoT in the hot Be star HD 51452. *Astronomy and Astrophysics*, 546, 47.

<http://hdl.handle.net/2268/132485>

Neiner, C, Alecian, E, **Briquet, M,** Floquet, M, Frémat, Y, Martayan, C, & Thizy, O. (2012). Detecting and modelling the magnetic field of the β Cephei star V 2052 Ophiuchi. *Astronomy and Astrophysics*, 537, 148.

<http://hdl.handle.net/2268/110790>

Oshagh, M, Grigahcène, A, Benomar, O, **Dupret, M.-A,** Monteiro, M. J. P. F. G, **Scuflaire, R,** Santos, N. C, Garrido, R, Balona, L. A, & Christensen-Dalsgaard, J. (2013). Successful Asteroseismology for a Better Characterization of the Exoplanet HAT-P-7b. *Astrophysics and Space Science Proceedings*, 31, 227.

<http://hdl.handle.net/2268/140164>

Ouazzani, R.-M, Roxburgh, I. W, & **Dupret, M.-A.** (2012). Pulsations of rapidly rotating evolved stars. *proceedings of the 20th Stellar Pulsation Conference Series, Granada sept 2011, 1301*, 2496.

<http://hdl.handle.net/2268/140152>

Ouazzani, R.-M, Dupret, M.-A, & Reese, D. (2012). Pulsations of rapidly rotating stars. I. The ACOR numerical code. *Astronomy and Astrophysics*, 547, 75.
<http://hdl.handle.net/2268/140167>

Ouazzani, R.-M, & Goupil, M.-J. (2012). Rotational splittings for slow to moderate rotators. Latitudinal dependence or higher order effects in Ω ? *Astronomy & Astrophysics*, 542(A99).
<http://hdl.handle.net/2268/142500>

Pápics, P. I, **Briquet, M,** Baglin, A, Poretti, E, Aerts, C, Degroote, P, Tkachenko, A, Morel, T, Zima, W, Niemczura, E, Rainer, M, Hareter, M, Baudin, F, Catala, C, Samadi, R, Auvergne, M, & Michel, E. (2012). Gravitoinertial and pressure modes detected in the B3 IV CoRoT target HD 43317. *Astronomy and Astrophysics*, 542, 55.
<http://hdl.handle.net/2268/132498>

Pasek, M, Ligni eres, F, Georgeot, B, & **Reese, D.** (2012). Regular oscillation sub-spectrum of rapidly rotating stars. *Astronomy and Astrophysics*, 546, 11.
<http://hdl.handle.net/2268/139445>

Reese, D, Marques, J. P, Goupil, M. J, Thompson, M. J, & Deheuvels, S. (2012). Estimating stellar mean density through seismic inversions. *Astronomy and Astrophysics*, 539(A63), 18.
<http://hdl.handle.net/2268/110670>

Salmon, S, Montalb an Iglesias, J, Morel, T, Miglio, A, **Dupret, M.-A, & Noels-Gr otsch, A.** (2012). Testing the effects of opacity and the chemical mixture on the excitation of pulsations in B stars of the Magellanic Clouds. *Monthly Notices of the Royal Astronomical Society*, 422, 3460-3474.
<http://hdl.handle.net/2268/123232>

Samadi, R, Belkacem, K, **Dupret, M.-A,** Ludwig, H.-G, Baudin, F, Caffau, E, Goupil, M.-J, & Barban, C. (2012). Amplitudes of solar-like oscillations in red giant stars. Evidence for non-adiabatic effects using CoRoT observations. *Astronomy and Astrophysics*, 543, 120.
<http://hdl.handle.net/2268/140181>

Van Grootel, V, Dupret, M.-A, Fontaine, G, Brassard, P, Grigahc ene, A, & Quirion, P.-O. (2012). The instability strip of ZZ Ceti white dwarfs I. Introduction of time-dependent convection. *Astronomy and Astrophysics*, 539, 87.
<http://hdl.handle.net/2268/108789>

In press

Bouabid, M.-P, Dupret, M.-A, Salmon, S, Montalb an, J, Miglio, A, & **Noels-Gr otsch, A.** (2013, January 01). Effects of the Coriolis force on high-order g modes in γ Doradus stars. *Monthly Notices of the Royal Astronomical Society*, 471.
<http://hdl.handle.net/2268/140113>

Grigahc ene, A, **Dupret, M.-A,** Sousa, S. G, Monteiro, M. J. P. F. G, Garrido, R, **Scuflaire, R, Gabriel, M,** Garrido, R, Balona, L. A, & Christensen-Dalsgaard, J. (2013). Towards Precise Asteroseismology of Solar-Like Stars. *Astrophysics and Space Science Proceedings series*, 31, 209.
<http://hdl.handle.net/2268/140165>

Reese, D, Prat, V, Barban, C, van 't Veer-Menneret, C, & MacGregor, K. B. (2013). Mode visibilities in rapidly rotating stars. *Astronomy and Astrophysics*, 550, 77.
<http://hdl.handle.net/2268/139558>

Van Grootel, V, Fontaine, G, Brassard, P, & **Dupret, M.-A.** (2013). The Newly Discovered Pulsating Low Mass White Dwarfs: An Extension of the ZZ Ceti Instability Strip. *Astrophysical Journal*, 762, 57.
<http://hdl.handle.net/2268/132332>

Thermodynamics of Irreversible Phenomena

Chiew, Y. S, **Chase, J. G**, LAMBERMONT, B, JANSSEN, N, Schranz, C, Moeller, K, Shaw, G. M, & **Desaive, T**. (2012). Physiological relevance and performance of a minimal lung model -- an experimental study in healthy and acute respiratory distress syndrome model piglets. *BMC Pulmonary Medicine*, 12:59.

<http://hdl.handle.net/2268/132448>

Collet, A, Desaive, T, & Dauby, P. (2012). Modèle unidimensionnel instationnaire de l'activité pacemaker cardiaque induite par le feedback mécano-électrique dans un environnement thermo-électro-mécanique. *Annales de Cardiologie et d'Angéiologie*.

<http://hdl.handle.net/2268/118721>

Desaive, T, LAMBERMONT, B, JANSSEN, N, GHUYSEN, A, Kolh, P, MORIMONT, P, **Dauby, P**, Starfinger, C, Shaw, G, & **Chase, J**. (2012). Assessment of ventricular contractility and ventricular-arterial coupling with a model-based sensor. *Computer Methods & Programs in Biomedicine*.

<http://hdl.handle.net/2268/133434>

Evans, A, Le Compte, A, Tan, C.-S, Ward, L, Steel, J, **Pretty, C. G, Penning, S**, Suhaimi, F, Shaw, G. M, **Desaive, T, & Chase, J. G**. (2012). Stochastic Targeted (STAR) Glycemic Control - Design, Safety and Performance. *Journal of Diabetes Science and Technology*.

<http://hdl.handle.net/2268/110513>

Fisk, L. M, Le Compte, A. J, Shaw, G. M, **Penning, S, Desaive, T, & Chase, J. G**. (2012). STAR Development and Protocol Comparison. *IEEE Transactions on Biomedical Engineering*.

<http://hdl.handle.net/2268/130690>

Jamaludin, U. K, Docherty, P. D, **Geoffrey Chase, J**, Le Compte, A, Shaw, G. M, **Desaive, T**, & Preiser, J.-C. (2012). Observation of incretin effects during enteral feed transitions of critically ill patients. *e-SPEN Journal*, 7(4), 154-e159.

<http://hdl.handle.net/2268/132033>

Lebon, G, Jou, D, & **Dauby, P**. (2012). Beyond the Fourier heat conduction law and the thermal no-slip boundary condition. *Physics Letters A*, 376(45), 2842-2846

<http://hdl.handle.net/2268/131887>

Machrafi, H. (Ed.). (2012). *Green Energy and Technology*. Sharjah, UAE: Bentham Science Publishers.

<http://hdl.handle.net/2268/126461>

Machrafi, H. (2012). Philosophy for controlling auto-ignition in an HCCI engine. In H., Machrafi (Ed.), *Green Energy and Technology* (pp. 323-366). Sharjah, UAE: Bentham Science Publishers.

<http://hdl.handle.net/2268/126458>

Moorhead, K. T, Piquilloud, L, LAMBERMONT, B, Roeseler, J, Chiew, Y. S, **Chase, J. G**, Revelly, J.-P, Bialais, E, Tassaux, D, Laterre, P.-F, Jolliet, P, Sottiaux, T, & **Desaive, T**. (2012). NAVA enhances tidal volume and diaphragmatic electro-myographic activity matching: a Range90 analysis of supply and demand. *Journal of Clinical Monitoring and Computing*, 1-10.

<http://hdl.handle.net/2268/131673>

MORIMONT, P, LAMBERMONT, B, **Desaive, T**, JANSSEN, N, **Chase, J. G**, & D'Orio, V. (2012). Arterial dP/dtmax accurately reflects left ventricular contractility during shock when adequate vascular filling is achieved. *BMC Cardiovascular Disorders*, 12:13.

<http://hdl.handle.net/2268/133435>

Penning, S, Le Compte, A. J, MASSION, P, Moorhead, K. T, **Pretty, C**, Preiser, J.-C, Shaw, G. M, Suhaimi, F, **Desaive, T**, & **Chase, J. G**. (2012, September). Second pilot trials of the STAR-Liege protocol for tight glycemic control in critically ill patients. *BioMedical Engineering OnLine*. <http://hdl.handle.net/2268/131458>

Pretty, C, Le Compte, A. J, **Chase, J. G**, Shaw, G. M, Preiser, J.-C, **Penning, S**, & **Desaive, T**. (2012, June 15). Variability of insulin sensitivity during the first 4 days of critical illness: implications for tight glycemic control. *Annals of Intensive Care*. <http://hdl.handle.net/2268/123385>

Scheid, B, Margerit, J, Iorio, C. S, Joannes, M, Heraud, M, Queekers, P, **Dauby, P**, & Colinet, P. (2012). Onset of thermal ripples at the interface of an evaporating liquid under a flow of inert gas. *Experiments in Fluids*, *52*, 1107-119. <http://hdl.handle.net/2268/103564>

Stevenson, D, Revie, J, **Chase, J. G**, Hann, C. E, Shaw, G. M, Lambermont, B, GHUYSEN, A, Kolh, P, & **Desaive, T**. (2012). Algorithmic Processing of Pressure Waveforms to Facilitate Estimation of Cardiac Elastance. *BioMedical Engineering OnLine*, *11*, 28. <http://hdl.handle.net/2268/131208>

Stevenson, D, Revie, J, **Chase, J. G**, Hann, C. E, Shaw, G. M, Lambermont, B, GHUYSEN, A, Kolh, P, & **Desaive, T**. (2012). Beat-to-beat estimation of the continuous left and right cardiac elastance from metrics commonly available in clinical settings. *BioMedical Engineering OnLine*, *11*(1), 73. <http://hdl.handle.net/2268/131206>

Ward, L, Steel, J, Le Compte, A, Evans, A, Tan, C.-S, **Penning, S**, Shaw, G. M, **Desaive, T**, & **Chase, J. G**. (2012). Data Entry Errors and Design for Model-Based Tight Glycemic Control in Critical Care. *Journal of Diabetes Science and Technology*. <http://hdl.handle.net/2268/110161>

Ward, L, Steel, J, Le Compte, A, Evans, A, Tan, C.-S, **Penning, S**, Shaw, G. M, **Desaive, T**, & **Chase, J. G**. (2012). Interface Design and Human Factors Consideration for Model-Based Tight Glycemic Control in Critical Care. *Journal of Diabetes Science and Technology*. <http://hdl.handle.net/2268/110514>

In press

Pironet, A, **Desaive, T**, **Kosta, S**, Lucas, A, **Paeme, S**, **Collet, A**, **Pretty, C**, Kolh, P, & **Dauby, P**. (2013). A multi-scale cardiovascular system model can account for the load-dependence of the end-systolic pressure-volume relationship. *BioMedical Engineering OnLine*, *12*(1), 8. <http://hdl.handle.net/2268/142146>

van Drunen, E, **Chase, J**, Chiew, Y, Shaw, G, & **Desaive, T**. (2013). Analysis of different model-based approaches for estimating dFRC for real-time application. *BioMedical Engineering OnLine*, *12*:9. <http://hdl.handle.net/2268/142054>