

Refereed articles in 2015

- [1] J. M. Almenara, C. Damiani, F. Bouchy, M. Havel, G. Bruno, G. Hébrard, R. F. Diaz, M. Deleuil, S. C. C. Barros, I. Boisse, A. S. Bonomo, G. Montagnier, and A. Santerne. SOPHIE velocimetry of Kepler transit candidates. XV. KOI-614b, KOI-206b, and KOI-680b: a massive warm Jupiter orbiting a G0 metallic dwarf and two highly inflated planets with a distant companion around evolved F-type stars. *Astron. Astrophys.*, 575:A71, March 2015.
- [2] J. M. Almenara, R. F. Díaz, R. Mardling, S. C. C. Barros, C. Damiani, G. Bruno, X. Bonfils, and M. Deleuil. Absolute masses and radii determination in multiplanetary systems without stellar models. *Monthly Notices of the RAS*, 453:2644–2652, November 2015.
- [3] T. Appourchaux, H. M. Antia, W. Ball, O. Creevey, Y. Lebreton, K. Verma, S. Vorontsov, T. L. Campante, G. R. Davies, P. Gaulme, C. Régulo, E. Horch, S. Howell, M. Everett, D. Ciardi, L. Fossati, A. Miglio, J. Montalbán, W. J. Chaplin, R. A. García, and L. Gizon. A seismic and gravitationally bound double star observed by Kepler. Implication for the presence of a convective core. *Astron. Astrophys.*, 582:A25, October 2015.
- [4] K. Belkacem, J. P. Marques, M. J. Goupil, B. Mosser, T. Sonoi, R. M. Ouazzani, M. A. Dupret, S. Mathis, and M. Grosjean. Angular momentum redistribution by mixed modes in evolved low-mass stars. II. Spin-down of the core of red giants induced by mixed modes. *Astron. Astrophys.*, 579:A31, July 2015.
- [5] K. Belkacem, J. P. Marques, M. J. Goupil, T. Sonoi, R. M. Ouazzani, M. A. Dupret, S. Mathis, B. Mosser, and M. Grosjean. Angular momentum redistribution by mixed modes in evolved low-mass stars. I. Theoretical formalism. *Astron. Astrophys.*, 579:A30, July 2015.
- [6] G. Bruno, J.-M. Almenara, S. C. C. Barros, A. Santerne, R. F. Diaz, M. Deleuil, C. Damiani, A. S. Bonomo, I. Boisse, F. Bouchy, G. Hébrard, and G. Montagnier. SOPHIE velocimetry of Kepler transit candidates. XIV. A joint photometric, spectroscopic, and dynamical analysis of the Kepler-117 system. *Astron. Astrophys.*, 573:A124, January 2015.
- [7] J. Cabrera, S. Csizmadia, G. Montagnier, M. Fridlund, M. Ammler-von Eiff, S. Chaintréuil, C. Damiani, M. Deleuil, S. Ferraz-Mello, A. Ferriño, D. Gandolfi, T. Guillot, E. W. Guenther, A. Hatzes, G. Hébrard, P. Klagyivik, H. Parviainen, T. Pasternacki, M. Pätzold, D. Sebastian, M. Tadeu dos Santos, G. Wuchterl, S. Aigrain, R. Alonso, J.-M. Almenara, J. D. Armstrong, M. Auvergne, A. Baglin, P. Barge, S. C. C. Barros, A. S. Bonomo, P. Bordé, F. Bouchy, S. Carpano, C. Chaffey, H. J. Deeg, R. F. Díaz, R. Dvorak, A. Erikson, S. Grziwa, J. Korth, H. Lammer, C. Lindsay, T. Mazeh, C. Moutou, A. Ofir, M. Ollivier, E. Pallé, H. Rauer, D. Rouan, B. Samuel, A. Santerne, and J. Schneider. Transiting exoplanets from the CoRoT space mission. XXVII. CoRoT-28b, a planet orbiting an evolved star, and CoRoT-29b, a planet showing an asymmetric transit. *Astron. Astrophys.*, 579:A36, July 2015.

- [8] W. J. Chaplin, M. N. Lund, R. Handberg, S. Basu, L. A. Buchhave, T. L. Campante, G. R. Davies, D. Huber, D. W. Latham, C. A. Latham, A. Serenelli, H. M. Antia, T. Appourchaux, W. H. Ball, O. Benomar, L. Casagrande, J. Christensen-Dalsgaard, H. R. Coelho, O. L. Creevey, Y. Elsworth, R. A. García, P. Gaulme, S. Hekker, T. Kallinger, C. Karoff, S. D. Kawaler, H. Kjeldsen, M. S. Lundkvist, F. Marcadon, S. Mathur, A. Miglio, B. Mosser, C. Régulo, I. W. Roxburgh, V. Silva Aguirre, D. Stello, K. Verma, T. R. White, T. R. Bedding, T. Barclay, D. L. Buzasi, S. Dehuevels, L. Gizon, G. Houdek, S. B. Howell, D. Salabert, and D. R. Soderblom. Asteroseismology of Solar-Type Stars with K2: Detection of Oscillations in C1 Data. *Publications of the ASP*, 127:1038–1044, October 2015.
- [9] C. Chiappini, F. Anders, T. S. Rodrigues, A. Miglio, J. Montalbán, B. Mosser, L. Girardi, M. Valentini, A. Noels, T. Morel, I. Minchev, M. Steinmetz, B. X. Santiago, M. Schultheis, M. Martig, L. N. da Costa, M. A. G. Maia, C. Allende Prieto, R. de Assis Peralta, S. Hekker, N. Theßel, T. Kallinger, R. A. García, S. Mathur, F. Baudin, T. C. Beers, K. Cunha, P. Harding, J. Holtzman, S. Majewski, S. Mészáros, D. Nidever, K. Pan, R. P. Schiavon, M. D. Shetrone, D. P. Schneider, and K. Stassun. Young $[\alpha/\text{Fe}]$ -enhanced stars discovered by CoRoT and APOGEE: What is their origin? *Astron. Astrophys.*, 576:L12, April 2015.
- [10] O. L. Creevey, F. Thévenin, P. Berio, U. Heiter, K. von Braun, D. Mourard, L. Bigot, T. S. Boyajian, P. Kervella, P. Morel, B. Pichon, A. Chiavassa, N. Nardetto, K. Perraut, A. Meiland, H. A. Mc Alister, T. A. ten Brummelaar, C. Farrington, J. Sturmann, L. Sturmann, and N. Turner. Benchmark stars for Gaia Fundamental properties of the Population II star HD 140283 from interferometric, spectroscopic, and photometric data. *Astron. Astrophys.*, 575:A26, March 2015.
- [11] C. Damiani and A. F. Lanza. Evolution of angular-momentum-losing exoplanetary systems. Revisiting Darwin stability. *Astron. Astrophys.*, 574:A39, January 2015.
- [12] G. R. Davies, W. J. Chaplin, W. M. Farr, R. A. García, M. N. Lund, S. Mathis, T. S. Metcalfe, T. Appourchaux, S. Basu, O. Benomar, T. L. Campante, T. Ceillier, Y. Elsworth, R. Handberg, D. Salabert, and D. Stello. Asteroseismic inference on rotation, gyrochronology and planetary system dynamics of 16 Cygni. *Monthly Notices of the RAS*, 446:2959–2966, January 2015.
- [13] C. Froment, F. Auchère, K. Bocchialini, E. Buchlin, C. Guennou, and J. Solomon. Evidence for Evaporation-incomplete Condensation Cycles in Warm Solar Coronal Loops. *Astrophys. J.*, 807:158, July 2015.
- [14] P. Lemaire, J.-C. Vial, W. Curdt, U. Schühle, and K. Wilhelm. Hydrogen Ly- α and Ly- β full Sun line profiles observed with SUMER/SOHO (1996–2009). *Astron. Astrophys.*, 581:A26, September 2015.
- [15] W. Liu, B. De Pontieu, J.-C. Vial, A. M. Title, M. Carlsson, H. Uitenbroek, T. J. Okamoto, T. E. Berger, and P. Antolin. First High-resolution Spectroscopic Observations of an Erupting Prominence Within a Coronal Mass

Ejection by the Interface Region Imaging Spectrograph (IRIS). *Astrophys. J.*, 803:85, April 2015.

- [16] B. Löptien, A. C. Birch, L. Gizon, J. Schou, T. Appourchaux, J. Blanco Rodríguez, P. S. Cally, C. Dominguez-Tagle, A. Gandorfer, F. Hill, J. Hirzberger, P. H. Scherrer, and S. K. Solanki. Helioseismology with Solar Orbiter. *Space Sci. Rev.*, 196:251–283, December 2015.
- [17] M. Meftah, A. Irbah, A. Hauchecorne, T. Corbard, S. Turck-Chièze, J.-F. Hochedez, P. Boumier, A. Chevalier, S. Dewitte, S. Mekaoui, and D. Salabert. On the Determination and Constancy of the Solar Oblateness. *Solar Phys.*, 290:673–687, March 2015.
- [18] T. S. Metcalfe, O. L. Creevey, and G. R. Davies. Asteroseismic Modeling of 16 Cyg A & B using the Complete Kepler Data Set. *Astrophys. J. Lett.*, 811:L37, October 2015.
- [19] N. Narukage, F. Auchère, R. Ishikawa, R. Kano, S. Tsuneta, A. R. Winebarger, and K. Kobayashi. Vacuum ultraviolet spectropolarimeter design for precise polarization measurements. *Applied Optics*, 54:2080, March 2015.
- [20] T. Sekii, T. Appourchaux, B. Fleck, and S. Turck-Chièze. Future Mission Concepts for Helioseismology. *Space Sci. Rev.*, 196:285–302, December 2015.
- [21] V. Silva Aguirre, G. R. Davies, S. Basu, J. Christensen-Dalsgaard, O. Creevey, T. S. Metcalfe, T. R. Bedding, L. Casagrande, R. Handberg, M. N. Lund, P. E. Nissen, W. J. Chaplin, D. Huber, A. M. Serenelli, D. Stello, V. Van Eylen, T. L. Campante, Y. Elsworth, R. L. Gilliland, S. Hekker, C. Karoff, S. D. Kawaler, H. Kjeldsen, and M. S. Lundkvist. Ages and fundamental properties of Kepler exoplanet host stars from asteroseismology. *Monthly Notices of the RAS*, 452:2127–2148, September 2015.
- [22] J.-C. Vial, G. Eurin, and W. Curdt. The Balmer Lines of He ii in the Blue Wing of the Hydrogen Lyman α Line Observed in a Quiescent Prominence. *Solar Phys.*, 290:381–387, February 2015.