

Pr. Magali Deleuil (Magali.Deleuil@lam.fr)

Laboratoire Astrophysique de Marseille

Position : Institut Universitaire de France - Senior 2009 & 2016

Aix-Marseille University, Marseille

Co-head of the Planetary System Group team at LAM

Education and qualifications

2002 : Habilitation , University of Provence : *Gaseous content of evolved circumstellar disks and exoplanet searches.*

1991 : Science Doctorate (Astronomy & Astrophysics), University of Provence : *Spectroscopic Analysis of stellar objects with UV excess.* Advisor : Pr M. Viton

Research Domains :

- Detection of extra-solar planets by transit or radial velocity methods. Physical properties of planetary systems. Measure of the host stars's parameters. Preparation and scientific exploitation of space-based missions.
- Study of the gas phase of circumstellar disks of young stars and debris disks: molecular gas content and physical properties.

Teaching activities

Courses over the 5 years of the university in various disciplines, with pedagogic responsibilities: astronomy, planetology, planetary systems, linear and tensorial algebra, numerical methods, thermodynamics, analysis (mathematic), computer science, programming, geometry.... In 2015 and 2017, development of a Massive Open Online Course (MOOC), set up on the French National Numerical Platform (FUN).

Project appointments

For the current space missions below I'm the coordinator of the french participation for CNES.

CHEOPS (2012 -) ESA S1: **member of the Board**; responsible for the preparation and delivery of the data reduction pipeline (WP#10) to the Science Operation Center.

PLATO (2008 -) ESA M3: **member of the Science Working Team (ESA appointment)** and of the Board; responsibility of some high level workpackages in both the PLATO Data Processing Center and the PLATO Scientific Preparation.

CoRoT (1996 - 2016) :

- 2000 - 2008: **leader** of the *Exoplanet Complementary Observations working Group*.

- 2009 - : **leader** of the *CoRoT Exoplanet Science Team*. Organization the annual workshops of the collaboration.

Recent major external appointments

2020 - Member of the National Council of the Astronomers and Physicists (elected)

2018 - Chair of the Scientific advisory committee of the T193 at OHP

2014 - 2017 Member of the CFHT Scientific Advisory Council

2012 - 2015 Member of the National Council of the Universities (appointed)

2014 Reviewer for the France National Research Agency

2013 Reviewer for the ERC committee

Member of the scientific committee of >20 national and international conferences

Supervisor of 8 PhD students, 15 Master students; mentoring of 13 post-docs (3 on-going)

Publications: 188 refereed publications, **8149** citations (H index 49)

Communications in international conferences : more than 100, including more than 20 invited/solicited.

Recent illustrative publications:

- Hoyer, S., Guterman, P., Demangeon, O., Sousa, S. G., Deleuil, M., Meunier, J.C., Benz, W.: *Expected performances of the Characterising Exoplanet Satellite (CHEOPS) III. Data reduction pipeline: architecture and simulated performances*, A&A in press (arXiv:1909.08363)
- Deleuil, M., Aigrain, S., Moutou, C., Cabrera, J., Bouchy, F. et al., 2018 A&A 619: *Planets, candidates, and binaries from the CoRoT/Exoplanet programme*
- Brugger, B., Mousis, O., Deleuil, M., Deschamps, F., 2017, ApJ 850: *Constraints on Super-Earth Interiors from Stellar Abundances*
- Courcol, B., Bouchy F., Deleuil M., 2016 MNRAS, 814: *A mass-metallicity envelope for low mass planets*
- Barros, S. C. C., Demangeon, O., Deleuil, M., 2016, A&A: *New planetary and EB candidates from Campaigns 1-6 of the K2 mission*
- Deleuil, M., Almenara, J.M., Santerne, A., Barros, S.C.C., Havel, M., et al., 2014, A&A 214, 564 *Kepler-412 system: probing the properties of a new inflated hot Jupiter*,
- Bruntt H., Deleuil M., Fridlund M., et al., *Improved stellar parameters of CoRoT-7 A star hosting two super Earths*, 2010 A&A, 519, 51
- Gazzano, J.-C., Kordopatis, G., Deleuil, M., de Laverny, P., Recio-Blanco, A., Hill, V., 2013, A&A 550, 125 *Characterisation of the Galactic thin disc with CoRoT targets*

The name of my PhD students and postdocs, at the time they were at LAM, are underlined.