

Curriculum Vitae

Sylvestre Lacour – Astrophysicist

LESIA, Observatoire de Paris
5, place Jules Janssen
92195 MEUDON – FRANCE

Tel: (+33) 1-45-07-7860
Fax: (+33) 1-45-07-2806
E-mail : sylvestre.lacour@obspm.fr

- **European Organisation for Astronomical Research, Germany** *Since August 2019*
 - Unpaid associate: “Exoplanets observed with optical interferometry”
- **Max-Planck-Institut für extraterrestrische Physik, Germany** *September 2017 - August 2019*
 - Visiting scientist: “GRAVITY and galactic center astrometry”
- **Cavendish Laboratory, Cambridge University, UK** *November 2016 - August 2017*
 - Visiting researcher: “Single mode interferometry and optical amplification”
- **Laboratory of Space Studies and Instrumentation in Astrophysics, France** *Since October 2008*
 - Tenured researcher / Chargé de recherche at CNRS
- **Laboratoire d’Astrophysique de Grenoble, Grenoble, France** *November 2007 - October 2008*
 - Postdoct (ANR fellowship): “Design and characterization of integrated optics devices for VLTI”
- **Sydney University, Sydney, Australie** *February 2007 - October 2007*
 - Postdoc (Lavoisier fellowship): “Aperture masking and single-mode fiber filtering”
- **Observatoire de Paris, Meudon, France** *September 2002 - January 2007*
 - PhD: “Imaging the stellar surface of evolved stars. Pupil rearrangement”
- **The Johns Hopkins University, Baltimore, USA** *November 2000 - August 2002*
 - Ph.D. classes: “Galactic Structure and Stellar Dynamics” and “ISM and Astrophysical Fluid Dynamics”
- **École Normale Supérieure, Cachan, France** *September 1996 - August 2000*
 - Agrégation of electrical engineering

- Astronomical research :

- **PICSAT / SSO 505 km** *Laboratoire d’études spatiales et d’instrumentation en astrophysique*
Photometry from space using single mode fibers *In orbit January 2018/ end of mission March 2018*
 - Principal investigator of the CubeSat satellite dedicated to the photometry of the β Pictoris system
 - Launched in January 2018, operational for 3 months
- **GRAVITY / VLTI** *Max Planck Institut fur Astrophysics*
Long baseline optical interferometry *First light in June 2015*
 - Design and realisation of the fringe tracker (including Kalman filter)
 - First observation of an exoplanet by optical interferometry. Characterisation of exoplanetary atmosphere
- **FIRST - DRAGONFLY / SUBARU Telescope** *Observatoire de Paris / Sydney University*
Pupil re-arrangement with single mode fibers *First light in July 2010*
 - Simulation and design of an imaging instrument using single mode fibers. Scientific objective: upgrade by a factor a hundred pupil masking’s performances (principe published in january 2007)
 - First light obtained at the Lick Observatory. Now behind the SCExAO instrument at SUBARU
- **SAM / NACO - SPHERE - ERIS - MICADO** *Sydney University*
Pupil masking *Available to the community since October 2008*
 - Installation of several pupil mask on instruments NACO and SPHERE at VLT
 - Specification and Design of the aperture masking pupil masks for ERIS and MICADO for the ELT
 - Detection and study of planet formation signposts around transition disks

- Awards & Grants:

- ANR - Starting Grant “SAM: Sparse Aperture Masking” (2014-2018): ANR-13-JS05-0005
- ERC - Starting Grant “LITHIUM : From planetary birth with aperture masking interferometry to nulling with Lithium Niobate technology” (2015-2020) : ERC-STG-639248
- MERAC 2015 prize from the European Astronomical Society “Best Early Career Researcher in New Technologies”