

Curriculum vitae

PERSONAL INFORMATION

Professor Guilaine Lagache

French - Born in 1972 - Two children aged 13 and 17

Website: <http://people.lam.fr/lagache.guilaine>

POSITION AND EDUCATION

2018 Senior Astronomer, "Exceptional class", Corps National des Astronomes et Physiciens
2014 Senior Astronomer, "1st grade", Corps National des Astronomes et Physiciens
Laboratoire d'Astrophysique de Marseille (LAM), Aix-Marseille University, France
2009 - 2013 Senior Astronomer, Institut d'Astrophysique Spatiale (IAS), France
2000 - 2009 Tenure Assistant Astronomer, IAS, France
2008 HDR¹ (D. Sc.) in Astrophysics, Paris-XI University
1998 - 2000 CNES post-doctoral fellowship, IAS
1995 - 1998 PhD Astrophysics, IAS, Paris-XI University

FELLOWSHIPS AND AWARDS

2018 - 2023 ERC Adv. Grant "CONCERTO"
2018 - 2021 A*MIDEX grant for the CONCERTO project
2012 Madame Victor Noury Prize, Grand Prix de l'Académie des Sciences
2008 "Young researcher" Prize of the French Astronomical Society
2005 - 2006 "Distinguished Visiting Associate In Physics", IPAC/Caltech, Pasadena
2006 - 2009 PI of D-SIGALE (<http://www.ias.u-psud.fr/dsigale/>) funded by the "Agence Nationale de la Recherche" (ANR)
2015-2018 Co-PI of "NIKA2Sky" funded by the ANR
Since 2003 Regular funding for scientific projects, travel and hardware from INSU programs (PNG, PNC, PNCG), CSAA, Labex and CNES
1998 - 2000 CNES post-doctoral fellowship

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

In the last decade, I have supervised 6 PhD students and 7 postdoctoral fellows (and 5 Master students). The list of the individual, and current position, is: Alexandre Beelen (tenured assistant astronomer, IAS/LAM), Matthieu Béthermin (tenured assistant astronomer, LAM), Benjamin Bertincourt (computing private company, New York), Karina Caputi (associate professor, Kapteyn Astronomical Institute, Groningen), Morgane Cousin (Data Scientist), Nestor Fernandez-Conde (R&D Manager, KREALINKS, France), Abhishek Maniyar (PhD, LAM), Delphine Marcillac (business manager, Ecole Polytechnique, France), Aurélie Penin (Senior Data scientist at Datastorm), Paolo Serra (Data Scientist at SparkBeyond), Maud Sorel (Physics teacher, France), Dylan Tweed (postdoctoral fellow, Shanghai Jiao Tong University), Niraj Welikala (research fellow, Oxford).

TEACHING ACTIVITY AND OUTREACH

Teaching duties represent 20% of my time. I have taught at the Paris-XI University during 13 years, and I am now teaching at the Aix-Marseille University, for undergraduate and graduate students. I am also active in outreach activities. For instance, I conducted a project on "Women in Science" in May 2017 with a hundred of students aged 13-14 years (9th Grade) following a preparatory work based on the movie "Hidden figures".

ORGANISATION OF SCIENTIFIC MEETINGS (selection)

May 2018 SKA: "Extraordinary Energy and Big-Data challenges"
LAM, Marseille (<https://people.lam.fr/lagache.guilaine/SKA.html>)
March 2016 "Opportunities and Challenges in Intensity Mapping", Stanford (US)
Scientific Organizing Committee (SOC) member
Oct 2012 "Deciphering the Cosmic infrared Background", Banyuls (France)
Chair of the SOC and LOC (Local Organizing Committee)
Summer School (CNRS thematic school), <http://www.ias.u-psud.fr/CIBA>

¹ The HDR (Habilitation à Diriger des Recherches) is the highest University diploma. It consists of a second thesis and is mandatory for obtaining a Professor position and for being responsible of PhD students.

2009 & 2012 Organization of two workshops for the French participation to the CCAT sub-millimeter telescope (50 persons each)

SELECTED COMMITTEE SERVICE AND COMMISSIONS OF TRUST

2018 Member of the Scientific Advisory Council of IRAM
2017 Member of the faculty recruiting committee at the ENS, France (recruitment of Nick Kaiser)
2017 Member of the High Council for Evaluation of Research and Higher Education committee for the Lagrange laboratory
2016 Member of the engineer recruiting committee at the Institut Néel (recruitment of M. Calvo)
2015-2016 Member of the Ad hoc committee called by the French governing bodies to define a joint roadmap on the future of Cosmic Microwave Background research
≥Jan 2016 Chair-person of the LAM Scientific Council
≥2015 Member of the national CNRS-INSU commission of Astronomy & Astrophysics, a board in charge of selecting the best national projects for funding (scientific secretary)
2014 Member of the board of the CNRS-INSU science pluri-annual strategic planning
2008 - 2012 Member of the CoNRS Section 17 (national evaluation and recruitment committee)
2006 - 2010 Member of the Astronomy Working Group of the French Space Agency (CNES)
2007- 2010 Member of the "Spitzer Science User Panel" (European representative)
2008-2009 Member of the board of the CNRS-INSU science pluri-annual strategic planning
Chair of the working group "Ground and Space experiment synergies"
2002-2006 Member of the board of the French Astronomical Society
Since 2007 Reviewer for research proposals for: the French national research agency (ANR Blanc and Chaires d'excellence), the Lagrange Institute (IDEX), the NSERC, the DIM-ACAV, INSU and the ERC
Since 2007 Member of 15 PhD and HDR juries
Since 2005 Member of Time Allocation Committees:
Spitzer, CFHT (TAC and LPTAC), IRAM, Opticon, ALMA

PUBLICATIONS

- **As of January 2019: 306 publications** published in refereed journal and more than 46,935 citations. The number refereed publications with at least 100 citations is 106 (and h-index= 103).
- 21 invited presentations in international conferences, and 33 invited seminars since 1997
- >30 oral presentations in international workshops or conferences.

MAJOR COLLABORATIONS AND TEAM MANAGEMENT

- **PI of the CONCERTO** (The CarbON CII line in post-rEionization and ReionizaTiOn epoch) project.
- NIKA2/IRAM camera: core team member. **Coordinator of the Guaranteed Time Project on Deep Cosmological Surveys (300 hours) and management of the team working on deep field surveys (18 persons)**. Participation to two observational campaigns per year at the IRAM 30m telescope and to the commissioning of the NIKA2 camera.
- French SKA White Book: coordination of the science themes "early Universe, cosmology and large scale structures" and "extra-galactic astronomy" (about 15 contributions).
- Leading role in the Planck collaboration, and in particular in the HFI consortium (see Section c): L1 operation, L2 data reduction pipeline (in particular photometric calibration), L3 validation, & science exploitation (leading the CIB analysis). Core team member, HFI associate and Planck Scientist. **Coordinator and team management of the working group dedicated to the CIB (WG6.6, 26 persons)**.
- Member of the executive committee of the Herschel Open Time Key Project H-ATLAS (2008 - 2011), "The Herschel Astrophysical Terahertz Large Area Survey" (600 hours).
- Associated Member of the Herschel/SPIRE Guaranteed Time Observation, high-z "Science Advisory Group" (900 hours).
- Member of the Spitzer/MIPS GTO deep survey team - PI/co-PI of three Spitzer/IRS Open Time Proposals (for a total of 404 hours).
- Member of the Archeops CMB collaboration (her main contribution was on photometric calibration and data reduction).
- Leading role in the FIRBACK/ISOPHOT collaboration -- FIRBACK was the 8th largest ISO observational program (PI: Jean-Loup Puget). **Responsible of the management of the FIRBACK collaboration (around 20 persons)**.