

Curriculum Vitae

Juan MACÍAS PÉREZ, 52 years old
Directeur de Recherche 1ère classe au CNRS
LPSC Grenoble France

Main research topics

Cosmology with cluster of galaxies and CMB anisotropies; Study of CMB temperature and polarisation anisotropies; Analysis and interpretation of cosmological data sets; Millimeter and infrared wavelength instrumentation, commissioning and performance; Characterization of Galactic emission in intensity and polarisation

Research experience

- **Directeur de Recherche 1ère classe:** LPSC Grenoble, from 2025
- **Professeur associé** à l'UGA, Grenoble, from 2023
- **Directeur de Recherche 2ème classe:** LPSC Grenoble, from 2013
- **Chargé de Recherche 1ère classe:** LPSC Grenoble, 2007-2013
- **Chargé de Recherche 2ème classe:** LPSC Grenoble, 2003-2007
- **Assistant Lecturer at Joseph Fourier University:** research at LPSC, Sept. 2002 – June 2003
- **Postdoc in the CMB group:** ISN-Grenoble, 2001-2002
- **Postdoc in the CMB group:** Collège de France, Paris, from May 2001 to September 2001
- **PhD in Astrophysics:** University of Manchester, 1998-2001

Research responsibilities and projects

- **RadioforegroundsPlus ERC HORIZON-RIA (2024-):** co-PI CNRS node
- **LiteBIRD collaboration (2020-):** Member of the editorial board
- **CONCERTO collaboration (2020-):** responsible for Cluster science
- **KISS collaboration (2018-):** Principal Investigator
- **RADIOFOREGROUNDS ERC H2020 COMPET-05-2015** project (2016-2018): ERC grant co-PI
- **EUCLID collaboration (2015-):** Lead of the Internal Data SGS analysis WP; Coordinator of the LPSC EUCLID project; In charge of the the NISP EMC tests
- **NIKA-NIKA2 collaboration (2011-):** Project scientist in charge of Large program observations and exploitation (from September 2016); Member of the NIKA2 editorial board; Coordinator of the IN2P3 NIKA2-CONCERTO master project; Project manager (2014-2016); Co-ordinator of the NIKA2 Sunyaev-Zeldovich large program (2015-2016)
- **ANR-12-BS05-0007** project (2013-2015): ANR Co-PI, coordinator of the LPSC node
- **Planck collaboration (2007-20016) :** Core Team member; Responsible for the public release of the Planck CO maps; Responsible for the public release of the Sunyaev-Zeldovich Compton parameter maps; Co-responsible for the TOI processing; Coordinator of the cryogenic control software verification and validation before launch
- **Archeops collaboration (2001-2004):** Responsible for the data analysis
- **Cosmosomas collaboration (1999-2001):** Coordinator of the calibration group; Responsible for the data analysis
- **Tenerife collaboration (1998-2001):** Coordinator of the calibration and maintenance; Responsible for the data analysis

General interest responsibilities

- Member of Comité Nationale Section 04 - LPSC representative at the FOCUS Label executive committee 2021-2024
- Principal Investigator of the KISS collaboration, 2018-2025
- Instrument scientist of the NIKA2 collaboration, 2016-
- Head of the COSMO ML team at LPSC, 2020-2022
- Head of the Planck-NIKA team, 2014-2020
- Member of Scientific council, CPPM 2017-2020, LPSC 2007-2010, 2022-

- Member of the African mm Telescope (AMT) science group, 2020-
- Member of the LPSC conseil d'unité, 2007-2010
- Member of the NIKA editorial board, 2013-, and the LiteBIRD editorial board 2022-
- Member of the Commission de spécialistes de l'UFR de Physique, Université Joseph Fourier, 2007-2008

Grants and distinctions

- 2024 Space Achievement Award by the Space Foundation to ESA and Euclid consortium
- 2024- RadioforegroundsPlus ERC HORIZON-RIA (co-PI)
- 2023-2025 CONCERTO ECOS-Sud Chili cooperation program C22U01 (PI)
- 2022; 2016-2018; 2012 ENIGMASS Labex postdoc project (PI)
- 2022 UGA IRGA PhD project (PI)
- 2022-2025 ECOS-Sud project with Chili (PI)
- 2020-2023 CONCERTO ERC H2020 788212 (collaborator)
- 2016-2019 RADIOFOREGROUNDS ERC H2020 COMPET-05-2015 (co-PI)
- 2013-2015 ANR-12-BS05-0007 (co-PI)
- 2019 Giuseppe and Vanna Cocconi Prize for the WMAP and Planck collaborations
- 2018 Gruber Cosmology Prize for the Planck Team Members, <http://gruber.yale.edu/prize/2018-gruber-cosmology-prize>

Education

- Diplôme d'Habilitation à diriger des recherches en physique, Université Joseph Fourier, 2011
- PhD in Astrophysique, Manchester University, 2001
- DEA (M2) in Astrophysics, Observatoire de Grenoble, Université Joseph Fourier, 1997
- Imperial College Diploma in Physics (London, UK), 1996
- Licenciado en astrofísica, Universidad de La Laguna (Tenerife-España), 1996

Teaching

- Lecturer at the Euclid summer school (2025-)
- Introduction to Python (12 hours/yr), M2 GDP Energie, UGA, 2022-
- Lecturer at the IRAM summer school (2019,2021,2025)
- Radiation heat transfert (30 hours/yr), M2 GDP Energie, UGA, 2019-
- Experimental Cosmology Lectures (12h/yr), ESIPAP, 2014-
- Cosmology lectures (12h/yr), Ecole Doctorale de Physique, UGA, 2013,2015,2017,2019
- Demi-ATER (98h), Université Joseph Fourier, Grenoble, 2002-2003
- Vacataire bénévole (40 h), IUT Grenoble, 2001-2002

Advising

- **44 Internships:** 4 international students from Imperial College of London and IAC, 40 national students (L2, L3, M1 and M2) in physics, mathematics and computing
- **10 PhD thesis:** Jonathan AUMONT, 2007, today CR1 at IAS, France; Lauranne FAUVET, 2010, today faculty member, UK; Guillaume HURIER, 2012, today postdoc at CEFCA, Teruel, Spain; Remi ADAM, 2015, today CRN at OCA, France; Alessia RITACCO, 2016, today CPJ Grenoble, Italy; Alejandro JIMENEZ, 2021, today postdoc in UAM, Madrid, Spain; Miren MUNOZ ECHEVARRIA, 2020-2023 today postdoc IRAP; Damien CHEROUVRIER, 2022-2025; Louis MIROUZE, 2024-, Victor CHALAMET, 2025-
- **12 Postdocs:** Stephane RANCHON: 2007-2008, Planck, CNES CDD; Sergi HILDEBRANDT: 2009-2010, Planck, CNRS CDD; Fouad KHARAB: 2010-2012, Planck, computing CNES CDD; Celine COMBET:

2011-2012, Planck, CNES postdoc; 2013, ENIGMASS postdoc; Barbara COMIS: 2012-2013, personal italian fundings; 2013-2015 CNES science postdoc; 2016-2018 ENIGMAS postdoc; Vincent PELGRIMS, 2016-2018, RADIOFOREGROUND H2020 project postdoc; Emanuel ARTIS, 2020-2022, ENIGMASS labex postdoc; Gael ALGUERO: 2023-, Euclid, computing CNES CDD; Mateo FERNANDEZ TORREIRO, 2023-2025, ENIGMASS labex postdoc; Aparajita SEN RadioforegroundPlus H2020 project postdoc

Scientific expertise

- Reviewer of scientific projects for ERC (European Research Council), for the AEI (Spanish Research Agency), for french labexs, for the South Pole French and Italian science board, for the SF2A
- Habilitation à diriger les recherches jury (rapporteur) in France - PhD thesis jury (rapporteur) in France 30 thesis, in Spain, 3 thesis
- Peer reviewer for A&A, MNRAS, ApJ, JCAP and Astroparticle Physics journals
- Internal reviewer for the Planck, NIKA2 and LiteBIRD collaboration
- Journal editor for Conference Papers in Physics up to 2017
- Member of the LiteBIRD and NIKA2 internal editorial boards

Conferences and seminars

- 21 oral contributions to international conferences, 9 as invited speaker
- 29 seminars in France, Spain, UK, Chili and Germany - Contributions to French GDRs, Labexs and CMB group meetings

Publications & outreach

- 554 peer review publications and proceedings; 93202 citations (H-index = 114)
- Member of the Planck outreach group at LPSC : large number of presentations, workshops, and expositions for general public; Video for EU-CLID collaboration outreach; High school science tutor during my PhD