


Instituto de Física de Cantabria
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EMPLOYMENT

- 2021 – CSIC Tenured Research Scientist, Consejo Superior de Investigaciones Científicas (CSIC), Institute of Physics of Cantabria, University of Cantabria, Spain
- 2020 – 2021 Research Fellow, Jodrell Bank Centre for Astrophysics, University of Manchester, UK
- 2013 – 2020 Postdoctoral Researcher, Jodrell Bank Centre for Astrophysics, University of Manchester, UK
- 2011 – 2013 Postdoctoral Researcher, Institut d’Astrophysique Spatiale, University of Paris 11, France
- 2009 – 2011 Postdoctoral Researcher, AstroParticule et Cosmologie (APC), University of Paris 7, France
- 2008 – 2009 Teaching and Research Assistant, University of Paris 11, France

EDUCATION

- 2005 – 2009 PhD in Theoretical Physics (advisor: Martin A. Bucher), University of Paris 11, France
Thesis: “Evolution of cosmological perturbations in braneworld universes” (highest honours)
- 2004 – 2005 Master (5th year) of Theoretical Physics, École Normale Supérieure, Paris, France
- 2003 – 2004 Master (4th year) of Fundamental Physics, University of Paris 11, France
(ranked 1st with highest honours)
- 2002 – 2003 Bachelor (3rd year) of Fundamental Physics, University of Paris 11, France
(ranked 1st with highest honours)
- 2001 – 2004 Engineer’s degree of Ecole Nationale Supérieure de Techniques Avancées (ENSTA), Paris, France. French “Grande École” in Engineering and Applied Mathematics.

TEACHING EXPERIENCE

- 2020 – 2021 Teaching Assistant (1 hour per week) in quantum mechanics, electromagnetism, and mathematics for undergraduate students in Physics at the University of Manchester, UK.
- Dec 2019 Invited Lecturer at the [XIII Tonale Winter School of Cosmology](#), Passo del Tonale, Italy.
Four lectures on CMB polarization and spectral distortions.
- Apr 2013 Invited Teaching Assistant (8 hours) in data analysis for PhDs at the International Young Astronomer School on Exploiting the Herschel and Planck data, Paris Observatory, France.
- 2008 – 2009 Teaching Assistant (96 hours) in mathematics, electromagnetism, mechanics, and optics for undergraduate students in Physics at the University of Paris 11, France.
- Oct 2007 Invited Teaching Assistant (16 hours) in probability and statistics for master students at the African Institute for Mathematical Sciences (AIMS), Cape Town, South Africa.
- 2005 – 2008 Teaching Assistant (192 hours) in statistical physics, wave physics, solid mechanics, geometrical optics for undergraduate students in Physics at University of Paris 11, France.

AWARDS

[Gruber Cosmology Prize](#) to the Planck team
Marcel Grossmann Award to the Planck scientific collaboration
Royal Astronomical Society 2018 Group Achievement Award to the Planck team

REFEREE *Nature Astronomy, Physical Review Letters, Physical Review D, Journal of Cosmology and Astroparticle Physics, Astronomy & Astrophysics, The Astrophysical Journal, Monthly Notices of the Royal Astronomical Society*

SCIENTIFIC RESPONSIBILITIES

- 2024 – Project manager for the Horizon Europe programme [RadioForegroundsPlus](#).
- 2022 – PhD supervisor of Jyothis Chandran and Sefa Pamuk at the University of Cantabria, Spain.
- 2019 – Coordinator and co-leader of the Science White Paper “[CMB Backlight](#)” in response to the [ESA Voyage 2050](#) call for the long-term European space science programme.
- 2018 – Member of the CMB collaborations [LiteBIRD](#), [Simons Observatory](#), and [PICO](#).
- 2016 – *LiteBIRD*: Co-lead of the Project Study Group on SZ science for the next-generation CMB satellite mission *LiteBIRD*, primarily dedicated to the search for primordial CMB B-modes and selected by the Japanese space agency JAXA for a launch in the 2030s.
- 2016 – 2018 *CORE*: Coordinator of the Foregrounds Working Group for the European CMB space mission *CORE*, proposed to ESA in 2017. Lead Author of a *CORE* Collaboration paper.
- 2014 – 2016 International Space Science Institute: invited member of an international team of 11 scientists in charge of the joint *Planck* - ACT analysis project “SZ clusters in the Planck era”.
- 2014 – BINGO: collaborator of the radio telescope experiment BINGO, a funded SKA pathfinder in Brazil, dedicated to BAO measurements through hydrogen 21-cm line intensity mapping.
- 2014 – 2018 Co-supervisor of three PhD students at the University of Manchester: Lucas Olivari (2014-2017), Carlos Hervias (2014-2017; University of Florida), Tianyue Chen (2015-2018; MIT).
- 2011 – 2018 *Planck* Scientist for the CMB space mission *Planck*, launched by ESA in May 2009. Corresponding Author of two *Planck* Collaboration papers.

SELECTED CONFERENCES (INVITED SPEAKER)

- 22-24 Nov 2023: “IX Meeting on Fundamental Cosmology”, Tenerife, Spain
- 12-15 Dec 2022: “Galactic science and CMB foregrounds”, Tenerife, Spain
- 23-27 May 2022: “From Planck to the future of CMB”, Ferrara, Italy
- 5-10 July 2021: “16th Marcel Grossmann Meeting” (remotely), Rome, Italy
- 16-19 Dec 2019: “B-mode from space”, Max Planck Institute, Garching, Germany
- 15-18 Oct 2018: “CMB foregrounds for B-mode studies”, Tenerife, Spain
- 1-7 Jul 2018: “15th Marcel Grossmann Meeting”, Rome, Italy
- 12-16 Mar 2018: “Probing fundamental physics with CMB spectral distortions”, CERN, Switzerland
- 29 Nov-1 Dec 2017: “CMB foregrounds workshop”, UCSD, San Diego, USA
- 11-16 Jul 2016: “CMB spectral distortions from cosmic baryon evolution”, Bangalore, India
- 4-8 Jul 2016: “European Week of Astronomy and Space Science”, Athens, Greece
- 17-20 May 2016: “Towards a next space probe for CMB observations and cosmic origins exploration”, CERN, Geneva, Switzerland (invited speaker & chairperson of the session on foregrounds)

SELECTED PUBLICATIONS (213 refereed publications. H-index: 99. Source: [SAO/NASA ADS](#))

- **Planck Collaboration (corresponding author: Remazeilles, M.; 200+ co-authors)**, “Planck 2015 results. XXII. A map of the thermal Sunyaev-Zeldovich effect”, [A&A 594, A22 \(2016\)](#). **353 citations.**
- **Planck Collaboration (corresponding author: Remazeilles, M.; 150+ co-authors)**, “Planck intermediate results. XLVIII. Disentangling Galactic dust emission and cosmic infrared background anisotropies”, [A&A 596, A109 \(2016\)](#). **291 citations.**
- **Remazeilles, M., et al (100+ co-authors)**, “Exploring Cosmic Origins with CORE: B-mode component separation”, [JCAP 04, 023 \(2018\)](#). **73 citations.**
- **Remazeilles, M., Dickinson, C., Eriksen, H. K., Wehus, I. K., “Sensitivity and foreground modelling for large-scale CMB B-mode polarization satellite missions”, [MNRAS 458, 2032 \(2016\)](#). 89 citations.**
- **Remazeilles, M., Dickinson, C., Banday, A. J., Bigot-Sazy, M.-A., Ghosh, T., “An improved source-subtracted and destriped 408 MHz all-sky map”, [MNRAS 451, 4311 \(2015\)](#). 266 citations.**
- **Remazeilles, M., Delabrouille, J., Cardoso, J.-F., “CMB and SZ effect separation with constrained Internal Linear Combinations”, [MNRAS 410, 2481 \(2011\)](#). 188 citations.**
- **Remazeilles, M., Delabrouille, J., Cardoso, J.-F., “Foreground separation with generalized Internal Linear Combinations”, [MNRAS 418, 467 \(2011\)](#). 153 citations.**
- **Remazeilles, M., Rotti, A., Chluba, J., “Peeling off foregrounds with the constrained moment ILC method to unveil primordial CMB B-modes”, [MNRAS 503, 2478 \(2021\)](#). 63 citations.**
- **Remazeilles, M., Bolliet, B., Rotti, A., Chluba, J., “Can we neglect relativistic temperature corrections in the Planck thermal SZ analysis?”, [MNRAS 483, 3459 \(2019\)](#). 49 citations.**