## Graça Rocha

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# **Experience**

Member of the Cambridge Planck Analysis Center (CPAC) 2001—2005

*Planck* Team member 2002 – present

Planck Scientist 2006 —present

Coordinator of four *Planck* Core Areas:

- o Planck Compact Source Investigation, CSI, Collaboration, 2006—2009
- o *Planck* Core Working area on Power Spectrum and Likelihoods for the first few years and Coordinator of the same Core area at JPL, 2006 present
- Leader of *Planck* Working Group on Fundamental Physics: constraining time and space variations of Fundamental Constants, 2009 – present
- Leader of *Planck* Working Group on Variability of Planck Point Sources, 2006 present

Member of the BICEP1 Collaboration, 2005 – 2009

Member of the Colloquium panel of the Astrophysics and Cosmology Colloquia Sessions at JPL, 2012 – present

Member of the International Astrostatistics Association, IAA, 2014 – present

Member of the COsmostatistics INitiative COIN, 2016 – present

Member of PICO: a NASA Probe-class space mission study, 2017 – 2018

Chair of PhysPAG, 2020-2021 and Co-Chair of PhysPAG, 2017—2020

Co-Chair of IP SIG and COS SIG, 2017—2020

Co-Lead of a KISS, study and workshop with title: *Designing Future CMB Experiments* held at Keck Institute, Caltech, March 2018

Main Scientific organizer, MSO of a COSPAR session with title: *Knocking on heaven's door: CMB in pursuit of the footprint of Inflation,* held in Pasadena, CA, USA, July 2018 Associate Editor in Frontiers in Astronomy and Space Sciences -- Section of Astrostatistics, 2020 – present

#### Education

Licenciatura, Mathematics (Pure Maths), University of Porto, Portugal, 1987 Licenciatura, Physics & Applied Maths, Astronomy, University of Porto, Portugal, 1991 MSc, in Mathematics, QMW, University of London, UK, 1992 PhD. in Physics, MRAO, and Downing College, University of Cambridge, UK, 1997

### **Employment**

Staff Research Scientist, in Astrophysics and Space Sciences Section (Org. 326) JPL, 2009 – present

Deputy Section Manager of the Astrophysics and Space Sciences Section (Org. 326), 3260 Group, JPL, 2021 – present

Group Supervisor of the Origin of the Universe Group (Org. 3268), 2019 – 2021 Discipline Program manager (DPM), PCOS related A&R (7X), 2020 – present

Visitor, Kavli Institute for Cosmology, University of Cambridge, UK, 2018 – present Group Supervisor of the 'Evolution of Galaxies' group at JPL, Caltech, 2011 –2012 Staff Scientist, Infrared Processing and Analysis Center, IPAC, Caltech, 2006 – 2009 Visiting Associate at Caltech, Physics, Math & Astronomy Department, 2016 – present Visiting Scholar at Caltech, Physics, Math & Astronomy Department, 2006 – 2016 Leverhulme Postdoctoral Fellow, University of Cambridge, UK, 2001 – 2005 Lecturer on 'Theoretical Cosmology, U. of Cambridge, 2004 – 2005 Postdoctoral Scholar in Physics, Observational Cosmology Group, Caltech, 2005 Academic Visitor, University of Oxford, 2000 – 2001 Collaborator at CAUP, U. of Porto, Portugal, 2001 – present Postdoctoral Fellow, CAUP, U. of Porto, Portugal; 1998 – 2001 Invited Lecturer, U. of Porto, 1998 Postdoctoral Fellow, Department of Physics, KSA, USA, 1997

#### Honors

**Honors:** 2019 Giuseppe and Vanna Cocconi Prize to Planck and WMAP; Marcel Grossman Institutional Award to the Planck Scientific Collboration; 2018 Gruber Prize in Cosmology awarded to the Planck team and its Principal Investigators Nazzareno Mandolesi and Jean-Loup Puget; Royal Astronomical Society's 2018 Group Achievement Award to Planck mission.

NASA Awards: NASA Exceptional Achievement Medal for the work on Planck Data Analysis, 2014; Early Release Compact Source Catalogue Team - Group Achievement Award, 2011; Planck Data Analysis and Operations Support Team - Group Achievement Award, 2011; Herschel & Planck Projects Teams - Group Achievement Honor Award, 2011; BICEP Experiment Team - Group Achievement Award, 2009; Planck Data Analysis Pipeline Development Team - Group Achievement Award, 2009; Planck Data Analysis Team - Group Achievement Award, 2009

**JPL awards:** Mariner Award - Bonus Award, 2013; Mariner Award - Bonus Award 2012; Planck Effective Beamshape Team - Team Bonus Award, 2011; Certificate of Recognition for 5 years of service to JPL, 2010

## **Selected publications**

Hancock S., Rocha G. et al., MNRAS, **294**, L1-L6, 1998 Rocha et al., MNRAS, **352**, 887-902, 2004 Carvalho P., Rocha G., et al., MNRAS **393**, 681-702, 2009 Rocha et al. 2011, MNRAS **414**, 823-846, 2011 Carvalho P., Rocha G., et al., MNRAS **427**, 1384-1400, 2012 Mitra S., Rocha G., et al., ApJ Supp **193**, 5, 2011 Iyer et al., ApJ **823**, 1091, 2016 Lacy, Mark et al., MNRAS, **438L**, 22L, 2019 *Planck* Papers, 2009, 2011, 2013, 2015, 2018 <a href="https://www.cosmos.esa.int/web/planck/publications">https://www.cosmos.esa.int/web/planck/publications</a> From SAO/NASA ADS record of publications:

Total number of publications (incl. Science White Papers): 282

Number of citations: 70,503 citations; h-index: 103