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Education

Ph.D., Astronomy & Astrophysics, University of Chicago	2001
M.S., Astronomy & Astrophysics, University of Chicago	1998
M.S., Earth & Planetary Sciences, MIT	1997
B.S., Physics, MIT	1997
B. S., Mathematics, MIT	1997
B.S., Earth, Atmospheric & Planetary Sciences, MIT	1997

Employment

Full Professor, University of California, Irvine	2010 – present
Chancellor's Fellow/Associate Professor, University of California, Irvine	2007 – 2010
Assistant Professor, University of California, Irvine	2005 – 2007
Visiting Faculty Associate, Caltech	2005 – present
Sherman Fairchild Senior Research Fellow in Astrophysics, Caltech	2001 – 2005

Recent Honors and Awards

NASA Group Achievement Awards for Cosmic Infrared Background Experiment	2014
NASA Group Achievement Award for Herschel-SPIRE Instrument Science Team	2010
NSF Faculty Early Career Development (CAREER) Award	2007
PI or CoI on Hubble, Spitzer and Herschel projects with funding > \$1 million, 2005-2015	
UCI Chancellor's Award for Excellence in Research and Distinguished Fostering of Undergraduate Research	2007
UCI School of Physical Sciences Award for Outstanding Contributions to Undergraduate Education	2007

Areas of Expertise

Asantha Cooray was a member of the U.S. *Herschel*-SPIRE Instrument Team, US (NASA) PI of *Herschel*-ATLAS, and is currently a NASA-selected US member of European Space Agency's *Euclid* mission. He is the lead science Co-I of NASA sounding rocket program Cosmic Background Experiment (CIBER), TIME-Pilot instrument to JCMT, and NASA Small Explorer SPHEREx (selected for a Phase-A study in July 2015). He has published 410 peer-reviewed papers in theoretical and observational astrophysics with over 20,000 citations since 1998 (h-index 72). Close to 200 of those publications were led by his research team under his supervision at UC Irvine. His current research effort is on developing multi-wavelength probes of reionization and first galaxies, sub-millimeter galaxies, primordial non-Gaussianity, CMB secondary effects, the extragalactic background light fluctuations at near and far-IR wavelengths, and strong gravitational lensing.

Project Experience Relevant to Present Proposal

- Co-I, Herschel-SPIRE US Instrument Team and HerMES (Herschel Multi-tier Extragalactic Survey; SPIRE GTO Program).
- NASA (US) Principle Investigator for Herschel-ATLAS Survey (The Herschel Astrophysical Terahertz Large Area Survey), this is the largest cosmological survey with Herschel Space Observatory in terms of both the time allocation and the sky area surveyed.
- Co-I, founding member and lead scientist, Cosmic Infrared Background Explorer (CIBER), a Rocket-based near-IR imager.
- Co-I, Spitzer SDWFS, HST/WFC3 CANDELS surveys.
- Co-I, The Zodiacal dust, Extragalactic Background and Reionization Apparatus; an instrument capable of astrophysical measurements from the vantage point of outer Solar System.
- Co-I, US Euclid Science Team. Competitively selected by NASA as a member of the US science team participating in Euclid (2012-2024).
- Science Editor, Journal of Cosmology and Astroparticle Physics (JCAP). An Institute of Physics (UK) and SISSA, Italy Journal. <http://jcap.sissa.it>
- Associate Editor in Astronomy, Royal Society Open Science.
- Research appeared in NSF Discovery News; co-hosted an episode of BBC One's *Bang Goes the Theory* Science show. News reports in New Scientist, Space.com, MSNBC etc.

Selected Refereed Publications (out of 410 peer-reviewed papers; h-index of 72)

- Mitchell-Wynne, K., Cooray, A., Gong, Y. et al. 2015, Ultraviolet Luminosity Density of the Universe During the Epoch of Reionization, *Nature Communications*, 6, 7945.
- Zemcov, M., Smidt, J., Arai, T. et al. 2014, On the origin of near-infrared extragalactic background light anisotropy, *Science*, 346, 732.
- Cooray, A., Smidt, J., De Bernardis, F. et al. 2012, A measurement of the intrahalo light fraction with near- infrared background anisotropies. *Nature*, 494, 514.
- Amblard, A., Cooray, A., Serra, P. et al. 2011, Submillimetre galaxies reside in dark matter haloes with masses greater than 3×10^{11} solar masses. *Nature*, 470, 510
- Negrello, M. et al. 2010, The Detection of a Population of Submillimeter-Bright, Strongly-Lensed Galaxies, *Science*, 330, 800.
- Gong, Y., Cooray, A., Silva, M., Santos, M., Bock, J., Bradford, M. and Zemcov, M. 2012, Intensity Mapping of the [CII] Fine Structure Line during the Epoch of Reionization, *Astrophysical Journal*, 745, 49.
- Casey, C., Narayanan, D. & Cooray, A. 2014, Dusty star-forming galaxies at high redshift, *Physics Reports*, 541, 45.
- Cooray, A. & Sheth, R. 2002, Halo Models of Large Scale Structure, *Physics Reports*, 372,1.
- A. Cooray, J. Bock, B. Keating, A. Lange, T. Matsumoto, First Star Signature in Infrared Background Anisotropies, *Astrophysical Journal*, 606, 611 (2004).