# Mathew Syriac Madhavacheril

Department of Physics and Astronomy

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#### Education

Stony Brook University, Stony Brook, NY

PhD (expected), Physics

University of Cambridge, Cambridge, UK

BA Affiliated, Part II and Part III Physics, First Class, 2011

St. Stephen's College, University of Delhi, New Delhi, India

BSc. (Hons.), Physics, First Class, 2009

### Research Interests

Cosmology and particle astrophysics; data analysis and theory

 $\operatorname{CMB}$  lensing; optical weak lensing and shear estimation; joint  $\operatorname{CMB/optical}$  probes

Galaxy clusters; growth of structure

Astrophysical probes of particle dark matter

### Awards and Grants

- Astronomical Society of New York (ASNY) Graduate Student Paper Prize (2015)
- LSST-DESC Student Travel Grant (2015)
- Editor's Suggestion and Viewpoint in Physics pick for first-author paper in Physical Review Letters (2015)
- H. B. Silsbee Award for Excellence, Physics Department, Stony Brook University (2015)
- Jonathan Kauffman Student Excellence Prize in Physics, Physics Department, Stony Brook University (2014)
- Jennings Prize, Wolfson College, University of Cambridge (2011)
- Gates Cambridge Scholarship, University of Cambridge (2009)
- Usha-India Physics Prize, Physics Department, St. Stephen's College, Delhi (2009)
- Science Meritorious Award, University of Delhi (2009)

## Teaching Experience

- Co-adviser for undergraduate researcher Danylo Yakymiv at Stony Brook University (2015)
- Teaching Assistant, Stony Brook University (2011 2013)
- Faculty, Cambridge Tradition and Cambridge Prep Summer Schools, Oxbridge Academic Programs, UK (2011, 2012)

## Professional Service

- Remote Observing Coordinator (ROC) for ACTPol observations since 09/14
- $\bullet$  Visited the ACTPol telescope site on Cerro Toco, Chile, 12/13 to help with site operations

### Talks and Posters

- Contributed Talk at Future Challenges in Shear Estimation, University of Pennsylvania, PA 11/15
- $\bullet$  LSST-DESC Meeting Theory and Joint Probes Work Update, Argonne National Lab, IL 10/15
- Astrophysics Seminar, Imperial College, UK 09/15
- Astrophysics Seminar, University College London, UK 09/15
- Institute of Astronomy Seminar, University of Cambridge, UK 09/15

- Oxford Astrophysics Seminar, University of Oxford, UK 09/15
- Contributed Talk at Cosmology Meeting 2015, Barcelona 09/15
- Joint Stony Brook / Brookhaven National Lab Cosmology Seminar, NY 06/15
- Seminar at Canadian Institute for Theoretical Astrophysics, Toronto 05/15
- Seminar at Perimeter Institute for Theoretical Physics, Waterloo, Canada 05/15
- $\bullet$  LSST-DESC Theory and Joint Probes Working Group Update, Pittsburgh, PA 04/15
- Yang Institute for Theoretical Physics Seminar, Stony Brook, NY 02/15
- Department of Astronomy Seminar, Columbia University, NY 02/15
- Cosmology Lunch Seminar, Princeton University, NJ 01/15
- CMB Polarization 2015, Minneapolis, MN (Poster) 01/15
- Department of Physics & Astrophysics Seminar, University of Delhi, India 08/14
- PCTS Dark Matter Workshop (Poster), Princeton University, NJ 10/13

Skills Python, C, Modern Fortran, MPI, bash shell scripting

**References** Prof. Neelima Sehgal Dr. Anže Slosar

Prof. David Spergel

neelima.sehgal@stonybrook.edu anze@bnl.gov dns@astro.princeton.edu