AGNIVA GHOSH **Curriculum Vitae**

Current

Physics Graduate Student and Teaching Assistant

Affiliation

School of Physics & Astronomy, University of Minnesota Twin Cities, MN 55455, USA

Contact Information Office: TATE 201-04, 116 Church St SE, Minneapolis, MN 55455, USA

Email: ghosh116@umn.edu

EDUCATION

Doctorate of Philosophy (Ph.D.) in Physics, August 2017-Present

- University of Minnesota Twin Cities, USA
- Advisor: Prof. Liliya L. R. Williams

Master of Science (M.Sc.) in Physics, July 2014-July 2016

- Indian Institute of Technology Kharagpur, India
- Masters' Thesis Advisor: Prof. Tirtha Sankar Ray

Bachelor of Science (B.Sc.) with Honors in Physics, June 2011-July 2014

• Serampore College (affiliated to University of Calcutta, India)

RESEARCH Interests

Theoretical Cosmology and Extragalactic Astrophysics: Gravitational Lensing in Galaxies and Clusters of Galaxies and Dark Matter.

OTHER RESEARCH EXPERIENCE

- April 2015 May 2016: Worked on Masters' Thesis on Gauge Coupling Unification in Particle Physics under supervision of Prof. Tirtha Sankar Ray at Indian Institute of Technology Kharagpur, India.
- January 2017 May 2017: Worked as Project Linked Person on Dark Matter and Inflation under supervision of Dr. Arindam Chatterjee at Indian Statistical Institute Kolkata, India.

Awards and ACHIEVEMENTS

- Allen M. Goldman Fellowship, School of Physics and Astronomy, University of Minnesota Twin Cities, 2021.
- · Outstanding Teaching Assistant Award by School of Physics and Astronomy, University of Minnesota Twin Cities, 2018.
- · Certificate for Outstanding Teaching by Center of Educational Innovation, University of Minnesota Twin Cities, Spring 2018 and Spring 2019.
- Proficiency Award for Best Masters' Thesis of Department of Physics, IIT Kharagpur in the session 2015-2016.
- 5-year INSPIRE Scholarship for Higher Education by Department of Science and Technology, Govt. of India, 2011.
- · Lectureship and Junior Research Fellowship awarded by the Council of Scientific and Industrial Research and University Grants Commission, Govt. of India, 2015.

TALKS

- Conferences and Contributed talk at BUFFALO Collaboration (Online) Meeting, 2021.
 - Contributed talk at European Astronomical Society (EAS) Annual Meeting, 2021.

LIST OF **PUBLICATIONS**

- 1. Agniva Ghosh, Liliya L R Williams, Jori Liesenborgs, Ana Acebron, Mathilde Jauzac, Anton M. Koekemoer, Guillaume Mahler, Anna Niemiec, Charles Steinhardt, Andreas L Faisst, David Lagattuta and Priyamvada Natarajan, Further support for a trio of mass-to-light deviations in Abell 370: free-form GRALE lens inversion using BUFFALO strong lensing data, 2021, MNRAS, in press, arXiv:2104.11781.
- 2. Ashish Kumar Meena, Agniva Ghosh, Jasjeet S. Bagla and Liliya L. R. Williams, Exotic Image Formation in Strong Gravitational Lensing by Clusters of Galaxies - II: Uncertainties, 2021, MNRAS, 506, 1526.
- 3. Agniva Ghosh, Liliya L. R. Williams and Jori Liesenborgs, Free-form GRALE lens inversion of galaxy clusters with up to 1000 multiple images, 2020, MNRAS, 494, 3998.