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

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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.