

Scott Perkins

Curriculum Vitae

257 Loomis Laboratory - University of Illinois at Urbana-Champaign

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EDUCATION

2019–2022 **Ph.D.**, *University of Illinois at Urbana-Champaign*, Urbana IL, 4.0/4.0.

Thesis Advisor: Dr. Nicolás Yunes

2017–2019 **M.Sc.**, *Montana State University*, Bozeman MT, 3.84/4.0.

2013–2017 **B.S.**, *Texas A&M University*, College Station TX, 3.97/4.0.

RESEARCH INTERESTS

- Fundamental Physics
 - Estimations of future constraints on extensions to GR through synthetic simulations of sources
 - Current constraints on modified theories of gravity through LIGO/Virgo data
- Gravitational Wave Modeling
 - Modeling gravitational waves from eccentric binaries

EXPERIENCE

Academic Research

2019– **Graduate Research Assistant**, *University of Illinois at Urbana-Champaign*.

Alternating semesters

Advisor: Dr. Nicolás Yunes

2017–2019 **Graduate Research Assistant**, *Montana State University*.

Alternating semesters

Advisor: Dr. Nicolás Yunes

2015–2017 **Undergraduate Research Assistant**, *Texas A&M University*.

Advisor: Dr. Casey Papovich

Teaching

2020– **Graduate Teaching Assistant**, *University of Illinois at Urbana-Champaign*.

Alternating semesters

- General Relativity I (Graduate)

2017–2019 **Graduate Teaching Assistant**, *Montana State University*.

Alternating semesters

- Calculus-based Classical Mechanics (Undergraduate)

- Modern Physics (Undergraduate)

- Solar System Astronomy (Undergraduate)

REFEREED JOURNAL PUBLICATIONS

1. Remya Nair, Scott Perkins, Hector O. Silva, and Nicolás Yunes. Fundamental physics implications for higher-curvature theories from binary black hole signals in the ligo-virgo catalog gwtc-1. *Phys. Rev. Lett.*,

123:191101, Nov 2019

2. Scott Ellis Perkins and Nicolas Yunes. Probing screening and the graviton mass with gravitational waves. *Classical and Quantum Gravity*, 2019

WORKS SUBMITTED FOR REVIEW

CONFERENCE TALKS

1. Scott Perkins. Probing screening and the graviton mass with gravitational waves. April APS, 2019

TECHNICAL SKILLS

Programming ◦ Proficient: Python, C++/C
Languages ◦ Familiar: CUDA, Java, HTML, CSS

Auxiliary ◦ Proficient: Mathematica, Latex, Linux, MacOS
Software and ◦ Familiar: Windows
Operating
Systems

AWARDS AND ACHIEVEMENTS

- 2019 **Graduate Research Fellowship**, *University of Illinois at Urbana-Champaign*.
- 2017 **Graduate Meritorious Award**, *Montana State University*.
- 2017 **Faculty's Student Achievement Award**, *Texas A&M University*.
- 2017 **Randall C. Shepard Award in Astrophysics**, *Texas A&M University*.
- 2013–2017 **President's Endowed Scholarship**, *Texas A&M University*.
- 2013–2017 **Rose Lafferty Scholarship**, *St. Andrew's Episcopal Church*.
- 2013 **National Merit Finalist**, *Texas A&M University*.
- 2012 **Eagle Scout**, *Boy Scouts of America*.

MEMBERSHIPS

- 2019– **LISA Consortium**, *Associate Member*.
- 2018– **American Physical Society**, *Member*.
- 2018–2019 **eXtreme Gravity Institute (XGI) at Montana State**, *Member*.

OUTREACH ACTIVITIES

- 2019 **Peaks and Potentials Youth Camp Course Intstructor**, *Montana State University*.
- 2018–2019 **XGI Outreach Volunteer**, *Montana State University*.
- 2015–2016 **Physics Festival Volunteer**, *Texas A&M University*.