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

Adademic 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 Languages
- Proficient: Python, C++/C
- Familiar: CUDA, Java, HTML, CSS

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

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*.