

# Hareesh Gautham Bhaskar

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Georgia Institute of Technology  
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<b>EDUCATION</b>	<i>Ph.D. in Physics</i> <a href="#">Georgia Institute of Technology</a> , Atlanta, GA • Advisor: Prof. <a href="#">Gongjie Li</a> .	2017-2023 (expected)
	<i>M.Sc. (Hons.) in Physics</i> <a href="#">Birla Institute of Technology-Pilani</a> , Hyderabad, India	2011-2016
	<i>B.E. (Hons.) in Computer Science</i> <a href="#">Birla Institute of Technology-Pilani</a> , Hyderabad, India	2011-2016
<b>EMPLOYMENT HISTORY</b>	<i>Associate Engineer</i> <a href="#">Qualcomm India Pvt. Ltd.</a>	2016 - 2017
<b>RESEARCH INTERESTS</b>	Planetary dynamics; compact object dynamics; gravitational wave progenitors; exoplanets; solar system; astrophysics theory and computation.	
<b>AWARDS</b>	<ul style="list-style-type: none"><li><i>Junior Research Fellowship</i> (declined), Council of Scientific and Industrial Research, India 2016</li><li><i>Summer Research Fellowship</i>, Indian Academy of Sciences, Bangalore 2014</li></ul>	
<b>TEACHING</b>	<ul style="list-style-type: none"><li>Teaching Assistant for Classical Mechanics I (graduate level), Intro Physics I (undergraduate level), Intro Physics II (undergraduate level)</li></ul>	
<b>MENTORING</b>	<ul style="list-style-type: none"><li><i>Undergraduate Students</i> Dennis Dong, Georgia Tech, 2019 Jingyu Zhang, Agnes Scott College, 2019</li></ul>	
<b>PROFESSIONAL SERVICES</b>	<ul style="list-style-type: none"><li>Referee for <i>MNRAS</i>; <i>ApJ Letters</i>; <i>SciPost Physics</i></li></ul>	
<b>OUTREACH</b>	<ul style="list-style-type: none"><li>Public talk at Alpharetta Library, Fulton County, Atlanta, Georgia.</li><li>Organized physics quizzes for the general public at BITS-Pilani, Hyderabad Campus.</li></ul>	
<b>PUBLICATIONS</b>	See also <a href="#">my google scholar</a> page. <i>Published:</i> <ol style="list-style-type: none"><li><b>Bhaskar, H. G.</b>, Gongjie Li, and Douglas N. C. Lin. Black hole mergers through evection resonances. <i>The Astrophysical Journal</i>, 934(2):141, aug 2022. ISSN 0004-637X. doi: 10.3847/1538-4357/ac7b26. URL <a href="https://doi.org/10.3847/1538-4357/ac7b26">https://doi.org/10.3847/1538-4357/ac7b26</a></li></ol>	

2. **Bhaskar, H. G.**, Gongjie Li, Sam Hadden, Matthew J. Payne, and Matthew J. Holman. Mildly hierarchical triple dynamics and applications to the outer solar system. *The Astronomical Journal*, 161:48, jan 2021. ISSN 0004-6256. doi: 10.3847/1538-3881/abcbfc. URL <https://ui.adsabs.harvard.edu/abs/2021AJ...161...48B>

Submitted:

1. G. Li, **Bhaskar, H. G.**, B. Kocsis, and D. N. C. Lin. Spin Variations of Black Hole Binaries in AGN Disks. *arXiv e-prints*, art. arXiv:2202.11739, feb 2022. URL <https://ui.adsabs.harvard.edu/abs/2022arXiv220211739L>
2. **Bhaskar, H. G.**, Gongjie Li, and Douglas N. C. Lin. Enhanced blackhole mergers in agn discs due to precession induced resonances. “*Enhanced Blackhole mergers in AGN discs due to Precession induced resonances*”, submitted to *ApJ*. (available upon request), 2022

To be submitted:

1. **Bhaskar, H. G.** and Gongjie Li. Dynamics of a test particle in a hierarchical triple system under an external perturbative potential. “*Dynamics of a Test Particle in a Hierarchical Triple System Under an External Perturbative Potential*”, in prep., 2022

## PRESENTATIONS

1. **Bhaskar, H. G.**, G. Li, S. Hadden, M. Payne, and M. Holman. Mildly-hierarchical triple dynamics and applications to the outer solar system. “*Mildly-Hierarchical triple dynamics and applications to the outer solar system*”, *CEHW Seminar, Pennsylvania State University*, 2022
2. **Bhaskar, H. G.**, Gongjie Li, and Douglas Lin. Blackhole mergers through resonant interactions in agn disc. “*Blackhole mergers through resonant interactions in AGN disc*”, *Perets Group Meeting, Technion–Israel Institute of Technology*, 2022
3. **Bhaskar, H. G.**, Gongjie Li, and Douglas Lin. Blackhole mergers through resonant interactions in agn disc. “*Blackhole mergers through resonant interactions in AGN disc*”, *Theory Group meeting, Northwestern University*, 2022
4. **Bhaskar, H. G.**, Gongjie Li, and Douglas Lin. Blackhole mergers through evection resonances. “*Black Hole Mergers Through Evection Resonances*”, *AAS/Division of Dynamical Astronomy Meeting*, 54, may 2022. URL <https://ui.adsabs.harvard.edu/abs/2022DDA....5330003B>
5. **Bhaskar, H. G.**, Gongjie Li, and Douglas Lin. Black hole mergers through evection resonances. “*Black Hole Mergers Through Evection Resonances*”, *Aspen Winter Conference*, January 2022. URL <https://sites.northwestern.edu/aspengw2022/scientific-program/>
6. **Bhaskar, H. G.**, G. Li, S. Hadden, M. Payne, and M. Holman. Mildly-hierarchical triple dynamics and applications to the outer solar system. “*Mildly-Hierarchical Triple Dynamics and Applications to the Outer Solar System*”, *Triple Evolution and Dynamics 3*, March 2021. URL <https://sites.northwestern.edu/trendy3/scientific-program/>
7. **Bhaskar, H. G.**, G. Li, S. Hadden, M. Payne, and M. Holman. Mildly-hierarchical triple dynamics and applications to the outer solar system. “*Mildly-Hierarchical Triple Dynamics and Applications to the Outer Solar System*”, *AAS/Division for Planetary Sciences Meeting Abstracts*, 52, oct 2020. URL <https://ui.adsabs.harvard.edu/abs/2020DPS....5230406B>

8. **Bhaskar, H. G.**, G. Li, S. Hadden, M. Payne, and M. Holman. Non-hierarchical triple dynamics and applications to planet nine. *“Non-hierarchical Triple Dynamics and Applications to Planet Nine”*, *AAS/Division of Dynamical Astronomy Meeting*, 51:P14, jun 2019. URL <https://ui.adsabs.harvard.edu/abs/2019DDA....50P..14B>