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EDUCATION	<b>Ph.D. Physics</b> California Institute of Technology, Pasadena, CA, USA Dissertation Advisor: Prof. Yanbei Chen Dissertation Title: <i>"Near horizon black hole physics"</i> Aug 2021	
	<b>B.S. Materials Physics</b> Nanjing University, Nanjing, Jiangsu, China Thesis Title: <i>"Into the Magnetic Skyrmion"</i> June 2015	
EMPLOYMENT	<b>Associate</b> Goldman Sachs 2001 Ross Ave, Dallas, TX, USA Oct 2021 - present	
	<b>Graduate Research and Teaching Assistant</b> California Institute of Technology 1200 E. California Blvd, Pasadena, CA, USA Duties: Graduate research in theoretical physics and teaching assitantship Fall 2015 - present	
	<b>Undergraduate Visiting Internship Student</b> The Hong Kong University of Science and Technology, Hong Kong, China Duties: Summer research in theoretical physics Summer 2014	
RESEARCH INTERESTS	General relativity, black hole physics, and quantum field theory in curved spacetime. Current focus includes near-horizon black hole physics, and physical implications from gravitational-wave experiments.	
PUBLICATIONS (ONLINE)	<b>ORCID:</b> <a href="https://orcid.org/0000-0002-3927-6843">0000-0002-3927-6843</a> <b>arXiv:</b> <a href="https://arxiv.org/a/chen_b_3.html">https://arxiv.org/a/chen_b_3.html</a> <b>INSPIRE-HEP:</b> <a href="http://inspirehep.net/author/profile/Bao.Yi.Chen.2">http://inspirehep.net/author/profile/Bao.Yi.Chen.2</a> <b>Google Scholar:</b> <a href="https://scholar.google.com/citations?user=hqZzQ4UAAAAJ">https://scholar.google.com/citations?user=hqZzQ4UAAAAJ</a>	
HONORS AND AWARDS	<b>Caltech C Fellowship</b> Caltech 2020	
	<b>Samsung Scholarship</b> Samsung Electronics Co., Ltd. 2013	
	<b>1st prize of CUMCM, Provincial Level</b> Contemporary Undergraduate Mathematical Contest in Modeling 2013 2013	

**Outstanding Student Award** 2012  
Nanjing University

**2nd prize of CUMCM, National Level** 2012  
Contemporary Undergraduate Mathematical Contest in Modeling 2012

#### TEACHING AND MENTORING

**Teaching Assistant**, California Institute of Technology

- Ph 236, General Relativity Fall 2019
- Ph 139, Introduction to Particle Physics Spring 2019
- Ph 125, Quantum Mechanics Winter 2018
- Ph 205, Relativistic Quantum Mechanics Winter 2017
- Ph 106, Topics in Classical Physics Fall 2017

**SURF Co-Mentor**, California Institute of Technology  
Daining Xiao (undergraduate), University of Cambridge Summer 2019

**SURF Co-Mentor**, LIGO  
Shuo Xin (undergraduate), Tongji University Summer 2019

#### PROFESSIONAL ACTIVITIES

**Journal Referee**  
Physics Letters B

#### LANGUAGE AND SKILLS

**Natural Language:** Native in Mandarin. Fluent in English.

**Programming Language:** Proficient in MATHEMATICA, Python, Bash. Experience in C, Swift.

**Markup Language:** Proficient in L<sup>A</sup>T<sub>E</sub>X, Markdown. Experience in HTML, CSS.

**Github:** <https://github.com/hughug>

#### INVITED TALKS

1. *Instability of exotic compact objects and its implications for GW echoes* [ [slides](#) ]  
Perimeter Institute, Waterloo, ON, Canada April 2019

#### CONTRIBUTED TALKS

1. *Instability of exotic compact objects and its implications for GW echoes* [ [slides](#) ]  
GR 22 & Amaldi 13, Valencia, Spain July 2019

2. *Gedanken experiments to destroy a BTZ black hole* [ [PDF](#) ]  
APS April Meeting 2019, Denver, CO, USA April 2019

3. *Deformations of extremal black holes in GR and from stringy interactions* [ [PDF](#) ]  
34<sup>th</sup> Pacific Coast Gravity Meeting, Caltech March 2018  
APS April Meeting 2018, Columbus, OH April 2018

4. *Linear metric perturbations in near-horizon extremal Kerr* [ [PDF](#) ]  
33<sup>rd</sup> Pacific Coast Gravity Meeting, UCSB March 2017

PUBLICATIONS IN  
PREPARATION

1. Shuo Xin, **B. Chen**, et. al. *Gravitational-wave echoes from spinning exotic compact remnant objects: numerical waveforms from the Teukolsky equation*

NON-REFEREED  
PUBLICATIONS

1. **B. Chen**, Yanbei Chen, Yiqiu Ma, Ka-Lok R. Lo, Ling Sun (2019), *Instability of exotic compact objects and its implications for gravitational-wave echoes*, prepared for submission to Phys. Rev. Lett, [[gr-qc/1902.08180](#)]

REFEREED  
PUBLICATIONS

1. **B. Chen**, Qingwen Wang, Yanbei Chen (2020), *Tidal response and near-horizon boundary conditions for spinning exotic compact objects*, [Phys. Rev. D \*\*103\*\*, 104054](#), [[gr-qc/2012.10842](#)]
2. **B. Chen**, Feng-li Lin, Bo Ning, Yanbei Chen (2020), *Constraints on low-energy effective theories from weak cosmic censorship*, [Phys. Rev. Lett. \*\*126\*\*, 031102](#), [[gr-qc/2006.08663](#)]
3. **B. Chen**, Feng-Li Lin, Bo Ning (2019), *Gedanken experiments to destroy a BTZ black hole*, [Phys. Rev. D \*\*100\*\*, 044043](#), [[gr-qc/1902.00949](#)]
4. **B. Chen**, L. C. Stein (2018), *Deformation of extremal black holes from stringy interactions*, [Phys. Rev. D \*\*97\*\*, 084012](#), [[gr-qc/1802.02159](#)]
5. **B. Chen**, L. C. Stein (2017), *Separating metric perturbations in near-horizon extremal Kerr spacetimes*, [Phys. Rev. D \*\*96\*\*, 064017](#), [[gr-qc/1707.05319](#)]
6. **B. Chen**, G. Chen, Y. E. Cheung, R. Xie, Y. Xin (2015), *Top-forms of leading singularities in nonplanar multi-loop amplitudes*, [Eur. Phys. J. C \*\*78\*\* 164](#), [[hep-th/1507.03214](#)]
7. **B. Chen**, G. Chen, Y. E. Cheung, Y. Li, R. Xie, Y. Xin (2014), *Nonplanar On-shell Diagrams and Leading Singularities of Scattering Amplitudes*, [Eur. Phys. J. C \*\*77\*\* 80](#), [[hep-th/1411.3889](#)]

## REFERENCES

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