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- EDUCATION** Ph.D. candidate, Astronomy, University of British Columbia, Canada 2019 - Now
M.S. Aerospace Science, Tsinghua University, China 2016 - 2019
B.S. Engineering Mechanics, Harbin Institute of Technology, China 2012 - 2016
- POSITIONS** Graduate Research Associate, University of British Columbia 2019 - Now
Advisor: Prof. [Brett Gladman](#)
 • Dynamics of the transneptunian region (Doctoral thesis)
- Undergraduate & Graduate Student, Tsinghua University 2015 - 2019
Advisors: Prof. [Junfeng Li](#) & Prof. [Shengping Gong](#)
 • Trans-lunar trajectory design using invariant manifolds (Senior thesis)
 • Dynamics of retrograde resonances (Master's thesis)
- FELLOWSHIPS** DiRAC Fellow Start in Sept. 2023
 Edwin S.H. Leong Fellow 2020 - 2023
 CSC Fellow 2019 - 2023
- REFEREED PUBLICATIONS** As first author:
1. [A Rogue Planet Helps Populate the Distant Kuiper Belt](#)
Huang, Gladman, Beaudoin, & Zhang. *ApJL*, 938, L23 (2022)
 2. [Free Inclinations for Transneptunian Objects in the Main Kuiper Belt](#)
Huang, Gladman, & Volk. *ApJS*, 259, 54 (2022)
 3. [Four-billion year stability of the Earth–Mars belt](#)
Huang, & Gladman. *MNRAS*, 500, 1151 (2021)
 4. [On the Instability of Saturn's Hypothetical Retrograde Co-orbitals](#)
Huang, Li, Li, & Gong. *MNRAS*, 488, 2543 (2019)
 5. [Kozai-Lidov Mechanism inside Retrograde Mean Motion Resonances](#)
Huang, Li, Li, & Gong. *MNRAS*, 481, 5401 (2018)
 6. [Dynamic Portrait of the Retrograde 1:1 Mean Motion Resonance](#)
Huang, Li, Li, & Gong. *AJ*, 155, 262 (2018)
- As contributing author:
7. The Population and Perihelion Distribution of the Detached Kuiper Belt
Beaudoin, Gladman, **Huang**, et al. accepted for *PSJ* (2023)
 8. [Flip mechanism of Jupiter-crossing orbits in the non-hierarchical triple system](#)
Li, Lei, **Huang**, & Gong. *MNRAS*, 502, 5584 (2021)
 9. [Dynamics of retrograde 1/n mean motion resonances: the 1/-2, 1/-3 cases](#)
Li, **Huang**, & Gong. *Astrophysics and Space Science*, 365, 165 (2020)
 10. [A semi-analytic model for the study of 1/1 resonant dynamics of the planar elliptic restricted co-orbital problem](#)
Li, **Huang**, & Gong. *Research in Astronomy and Astrophysics* (2020)
 11. [Assess the Risk of Potentially Hazardous Asteroids through Mean Motion Resonance](#)
Li, **Huang**, & Gong. *Astrophysics and Space Science*, 364, 78 (2019)
 12. [Survey of asteroids in retrograde mean motion resonances with planets](#)
Li, **Huang**, & Gong. *A&A*, 630, A60 (2019)
 13. [Centaur Potentially in Retrograde Co-orbit Resonance with Saturn](#)
Li, **Huang**, & Gong. *A&A*, 617, A114 (2018)

CONFERENCES

1. Steady State of a Planet-scattering Debris Disk
Huang, & Gladman. DDA #54, East Lansing, MI, US (2023)
2. Sednoid Creation by Scattered Rogue Planets
Gladman, & **Huang**. DDA #54, East Lansing, MI, US (2023)
3. Effect of a Rogue Planet on the Early Solar System | [Video](#)
Huang, & Gladman. DPS #54, London, ON, Canada (2022)
4. The Population and Perihelion Distribution of the Detached Kuiper Belt | [Video](#)
Beaudoin, Gladman, & **Huang**. DPS #54, London, ON, Canada (2022)
5. A Clearer View of the Primordial Kuiper Belt's inclination structure
Huang, Gladman, & Volk. COSPAR #44, Athens, Greece (2022)
6. A Rogue Planet Populated the Distant Kuiper Belt | [Video](#)
Huang, Gladman, & Beaudoin. DDA #53, Manhattan, NY, USA (2022)
7. Secular Free Inclinations in the Main Kuiper Belt | [Video](#)
Gladman, **Huang**, & Volk. DDA #53, Manhattan, NY, USA (2022)
8. Dynamics of the Retrograde Co-orbital resonance
Huang, Li, Li, & Gong. COOMOT, Milan, Italy (2022)
9. Four Billion Year Stability of the Earth–Mars Belt
Huang, & Gladman. DDA #51, virtual meeting (2020)
10. Four Billion Year Stability of the Earth–Mars Belt
Huang, & Gladman. DPS #52, virtual meeting (2020)
11. Primordial Stability of the Earth–Mars Belt
Huang, & Gladman. 14th EPSC, virtual meeting (2020)
12. Dynamics of the Retrograde 1/1 Mean Motion Resonance
Huang, Li, Li, & Gong. DDA #49, San Jose, CA, USA (2018)

SCIENCE TEAMS CLASSY: Classical and Large-A Solar System Survey 2022 - Now
• Dynamical classification & modelling of discovered TNOs

PRESS COVERAGE [New Scientist](#): A long-lost planet could explain unexpectedly distant asteroids 2022
[MacMillan Space Centre](#): Ask An Astronomer - Lunar New Year of the Rabbit 2023

AWARDS AND SCHOLARSHIPS Outstanding Graduate of Beijing 2019
Scholarship of Takada for Excellent Students of Tsinghua 2018
Second Prize in the 10th National Zhou Peiyuan Mechanics Competition 2015
Second Place in the 2nd “Space Innovative Cup” Spacecraft Design Competition 2014
Heilongjiang Province, Student of Distinction 2014
Yu Menglun Scholarship 2014
Yu Menglun Award for Science & Innovation 2014
HIT Student of Distinction 2013
China National Scholarship 2013

TEACHING T.A. for Astro 310, UBC 2021
T.A. for Astro 310 & 311, UBC 2020
T.A. for Astro 101, UBC 2019
T.A. for Vibration theory, Tsinghua University 2017
T.A. for Theoretical mechanics, Tsinghua University 2016

PROFESSIONAL SERVICE Referee for AJ, MNRAS

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