Max Goldberg Last update: April 23, 2024

Contact Laboratoire Lagrange, Observatoire de la Côte d'Azur max.goldberg@oca.eu Information Boulevard de l'Observatoire maxgoldberg.me 06304 Nice Cedex 4, France Academic Postdoctoral Researcher 2024 -Appointments CNRS, Observatoire de la Côte d'Azur, Nice, France **EDUCATION** California Institute of Technology, Pasadena, USA 2019 - 2024Ph.D., Astrophysics (2024) | M.S., Astrophysics (2022) Thesis: Early Dynamics and Evolution of Extrasolar Planetary Systems Advisor: Konstantin Batygin University of Chicago, Chicago, USA 2015 - 2019**B.S.** (with honors), Astrophysics | **B.S.**, Mathematics Thesis: Dynamical Detection of Singly-Transiting Circumbinary Planets Advisor: Daniel Fabrycky FIRST AUTHOR Goldberg, M. and Batygin, K. "Chaotic tides as a solution to the Hyperion problem." Icarus, **PUBLICATIONS** 413, (2024). Goldberg, M., Fabrycky, D., et al. "A $5M_{\text{Jup}}$ Coplanar Circumbinary Planet Around Kepler-1660AB." Monthly Notices of the Royal Astronomical Society, 525.3, (2023). Goldberg, M. and Batygin, K. "Dynamics and Origins of the Near-Resonant Kepler Planets." The Astrophysical Journal, 948, (2023). Goldberg, M., Batygin, K., and Morbidelli, A. "A Criterion for the Stability of Resonant Chains." Icarus, 388, (2022). Goldberg, M. and Batygin, K. "Architectures of Compact Super-Earth Systems Shaped by Instabilities." The Astronomical Journal, 163.5, (2022). Goldberg, M. and Batygin, K. "A Tidal Origin for a Three-body Resonance in Kepler-221." The Astronomical Journal, 162.1, (2021). Goldberg, M., Hadden, S., Payne, M. J., and Holman, M. J. "Prospects for Refining Kepler TTV Masses Using TESS Observations." The Astronomical Journal, 157.4, (2019). Nagpal, V., Goldberg, M., and Batygin, K. "Breaking Giant Chains: Early-Stage Instabilities Co-Authored **PUBLICATIONS** in Long-Period Giant Planet Systems." Accepted to the Astrophysical Journal. Dai, F., Masuda, K., Beard, C., Robertson, P., Goldberg, M., et al. "TOI-1136 is a Young, Coplanar, Aligned Planetary System in a Pristine Resonant Chain." The Astronomical Journal, 165.2, (2023). Petit, A., Pichierri, G., Goldberg, M., Morbidelli, A. "Dynamical Evolution of Planetary Sys-Воок Chapters tems." Handbook of Exoplanets, 2nd ed. (upcoming). 2021 Raynor L. Duncombe Student Research Prize AWARDS AND Honors David and Barbara Groce Travel Fund 2021 Origins of Life Summer Undergraduate Research Prize Award 2018

2017

UCISTEM Summer Research Grant

SELECTED RESEARCH TALKS AND POSTERS	The Inner Disk of Young Stars Conference	2023
	Southwest Research Institute Colloquium (invited)	2022
	Exoplanets IV Meeting	2022
	Caltech Center for Comparative Planetary Evolution 101 Series	2022
	AAS Division of Dynamical Astronomy Meeting	2021
TEACHING ASSISTANTSHIPS	Ay/Ge 133: Formation and Evolution of Planetary Systems, Caltech	Fall 2021
	Ph 1c: Electromagnetism, Caltech	Spring 2021
	Ay/Ge 133: Formation and Evolution of Planetary Systems, Caltech	Winter 2021
	Ph 1a: Classical Mechanics, Caltech	Fall 2020
	BPRO 28800: From Fossils to Fermi's Paradox, UChicago	Winter 2019
MENTORING AND OUTREACH	Summer Undergraduate Research Fellowship (SURF) Mentor, Caltech Mentored a UC Berkeley undergraduate for a summer and beyond, leading t	Summer 2022
	journal article on the formation of giant planet systems	
	Summer Research Connection Mentor, Caltech	Summer 2021
	Mentored three high school students, teaching the basics of N-body simulations and Galilean moon formation to study the role of giant impacts in the Jovian system	
	Caltech Astronomy Outreach Volunteer	2019 - 2023
	Astronomy on Tap Speaker	
	Led public telescope observations of planets and the transit of Mercury	
	Assisted in Planet Finder Academy, program for high school students to learn ab and exoplanet detection	out astronomy
Professional Service	Journal Referee for Monthly Notices of the Royal Astronomical Society $(2\times)$, Astronomical Journal (1) , Astronomy & Astrophysics (1)	