

CONTACT INFORMATION	1200 E California Blvd MC 249-17 Pasadena, CA 91125 USA	mg@astro.caltech.edu maxgoldberg.me
EDUCATION	California Institute of Technology , Pasadena, USA Ph.D. , Astrophysics (2024) M.S. , Astrophysics (2022) Thesis: <i>Early Dynamics and Evolution of Extrasolar Planetary Systems</i> Advisor: Konstantin Batygin University of Chicago , Chicago, USA B.S. (with honors) , Astrophysics B.S. , Mathematics Thesis: <i>Dynamical Detection of Singly-Transiting Circumbinary Planets</i> Advisor: Daniel Fabrycky	2019 – 2024 2015 – 2019
FIRST AUTHOR PUBLICATIONS	Goldberg, M. and Batygin, K. “Chaotic tides as a solution to the Hyperion problem.” Accepted to <i>Icarus</i> . Goldberg, M. , Fabrycky, D., et al. “A $5M_{\text{Jup}}$ Coplanar Circumbinary Planet Around Kepler-1660AB.” <i>Monthly Notices of the Royal Astronomical Society</i> , 525.3, (2023). Goldberg, M. and Batygin, K. “Dynamics and Origins of the Near-Resonant Kepler Planets.” <i>The Astrophysical Journal</i> , 948, (2023). Goldberg, M. , Batygin, K., and Morbidelli, A. “A Criterion for the Stability of Resonant Chains.” <i>Icarus</i> , 388, (2022). Goldberg, M. and Batygin, K. “Architectures of Compact Super-Earth Systems Shaped by Instabilities.” <i>The Astronomical Journal</i> , 163.5, (2022). Goldberg, M. and Batygin, K. “A Tidal Origin for a Three-body Resonance in Kepler-221.” <i>The Astronomical Journal</i> , 162.1, (2021). Goldberg, M. , Hadden, S., Payne, M. J., and Holman, M. J. “Prospects for Refining Kepler TTV Masses Using TESS Observations.” <i>The Astronomical Journal</i> , 157.4, (2019).	
CO-AUTHORED PUBLICATIONS	Nagpal, V., Goldberg, M. , and Batygin, K. “Breaking Giant Chains: Early-Stage Instabilities in Long-Period Giant Planet Systems.” Under review in the <i>Astrophysical Journal</i> . 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.” <i>The Astronomical Journal</i> , 165.2, (2023).	
BOOK CHAPTERS	Petit, A., Pichierri, G., Goldberg, M. , Morbidelli, A. “Dynamical Evolution of Planetary Systems.” <i>Handbook of Exoplanets</i> , 2nd ed. (upcoming).	
AWARDS AND HONORS	Raynor L. Duncombe Student Research Prize	2021
	David and Barbara Groce Travel Fund	2021
	Origins of Life Summer Undergraduate Research Prize Award	2018
	UCISTEM Summer Research Grant	2017

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 , <i>Caltech</i>	Fall 2021
	Ph 1c: Electromagnetism , <i>Caltech</i>	Spring 2021
	Ay/Ge 133: Formation and Evolution of Planetary Systems , <i>Caltech</i>	Winter 2021
	Ph 1a: Classical Mechanics , <i>Caltech</i>	Fall 2020
	BPRO 28800: From Fossils to Fermi's Paradox , <i>UChicago</i>	Winter 2019
MENTORING AND OUTREACH	Summer Undergraduate Research Fellowship (SURF) Mentor, <i>Caltech</i>	Summer 2022
	<i>Mentored a UC Berkeley undergraduate for a summer and beyond, leading to a submitted journal article on the formation of giant planet systems</i>	
	Summer Research Connection Mentor, <i>Caltech</i>	Summer 2021
	<i>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</i>	
	Caltech Astronomy Outreach Volunteer	2019 – 2023
PROFESSIONAL SERVICE	<i>Astronomy on Tap Speaker</i>	
	<i>Led public telescope observations of planets and the transit of Mercury</i>	
	<i>Assisted in Planet Finder Academy, program for high school students to learn about astronomy and exoplanet detection</i>	
	Journal Referee for <i>Monthly Notices of the Royal Astronomical Society</i> (2×), <i>Astronomical Journal</i> (1), <i>Astronomy & Astrophysics</i> (1)	