

Nick Choksi

✉ nchoksi@berkeley.edu

Education

- Present **Ph.D. Candidate in Astrophysics**, *University of California, Berkeley*.
2020 **M.A. Astrophysics**, *University of California, Berkeley*.
2019 **B.A. Physics; B.A. Astrophysics**, *University of California, Berkeley*.

Research interests

planet formation, gravitational dynamics, planet-disk interactions, stellar cluster formation

Publications

1. **Choksi**, Chiang, Fung, and Zhu, “[The maximum accretion rate of a protoplanet: how fast can runaway be?](#),” MNRAS accepted, arXiv 2305.01684.
2. **Choksi** & Chiang, “[Exciting the TTV Phases of Resonant Sub-Neptunes](#),” MNRAS 522, 1914 (2023), arXiv 2211.15701.
3. Rein & **Choksi**, “[An Implementation of Stochastic Forces for the N-body Code REBOUND](#),” RNAAS 6, 5 (2022), arXiv 2205.06757.
4. **Choksi** & Chiang “[Testing planet formation from the ultraviolet to the millimeter](#),” MNRAS 510, 1657 (2021), arXiv 2110.00029.
5. **Choksi**, Chiang, Connolly, Gainsforth, and Westphal, “[Chondrules from high-velocity collisions: thermal histories and the agglomeration problem](#),” MNRAS 503, 3297 (2021), arXiv 2009.10093.
6. **Choksi** & Chiang, “[Sub-Neptune Formation: The View from Resonant Planets](#),” MNRAS 495, 4192 (2020), arXiv 2003.03388.
7. **Choksi** & Kruijssen, “[On the initial mass-radius relation of stellar clusters](#),” MNRAS 507, 5492, arXiv 1912.05560.
8. **Choksi** & Gnedin, “[Origins of scaling relations of globular cluster systems](#),” MNRAS 488, 5409 (2019), arXiv 1905.05199.
9. **Choksi** & Gnedin, “[Formation of Globular Cluster Systems II: Impact of the cutoff of the cluster initial mass function](#),” MNRAS 486, 331 (2019), arXiv 1810.01888.
10. **Choksi**, Volonteri, Colpi, Gnedin, and Li, “[The star clusters that make black hole binaries across cosmic time](#),” ApJ 873, 100 (2019), arXiv 1809.01164.
11. El-Badry, Quataert, Weisz, **Choksi**, and Boylan-Kolchin, “[The formation and hierarchical assembly of globular cluster populations](#),” MNRAS 482, 4528 (2018), arXiv 1805.03652.
12. **Choksi**, Gnedin, and Li, “[Formation of globular cluster systems: from dwarf galaxies to giants](#),” MNRAS 480, 2343 (2018), arXiv 1801.03515.
13. **Choksi**, Behroozi, Volonteri, Schneider, Ma, Silk, and Moster, “[Recoiling supermassive black hole escape velocities from dark matter halos](#),” MNRAS 472, 1526 (2017), arXiv 1707.06220.

Invited talks and accepted conference presentations

1. McGill, Trottier Space Sciences Seminar (2023)
2. Hawaii IfA, Star and Planet Formation Seminar (2023)
3. Harvard, CfA Seminar (2022)
4. Indiana University, Lunch Seminar (2021)
5. Conference: Exoplanet Demographics (2020)
6. Conference: Formation of stars and massive clusters in dwarf galaxies over cosmic time, Leiden (2019)
7. Conference: Formation of globular clusters at high and low- z , Sesto (2018)
8. Conference: Galaxy formation workshop, Santa Cruz (2018)
9. Conference: Massive black holes in evolving galaxies, Institut d’Astrophysique Paris (2017)

Honors and Awards

- 2021 Fellow, H2H8 (\$10,000)
- 2020 Esper Larsen Jr. Grant, Berkeley Earth & Planetary Science Department (\$20,000)
- 2019-2024 NSF Graduate Research Fellowship
- 2019 Student commencement speaker, Berkeley Astronomy
- 2019 Finalist, Hertz Fellowship
- 2018 Isidore Pomerantz Award, Berkeley Physics
- 2017 Fellow, Balzan Center for Cosmological Studies (\$2000)

Service and Outreach

- 2019 - Current **Referee**, *MNRAS*.
- 2021 **Team member, Berkeley Discover Astronomy & Physics.**
Collaborator on successful proposal (\$800,000 over 4 years) to revamp undergraduate teaching and mentoring in physics & astronomy at Berkeley.
- 2021 **Research mentor**, *Lister Chen*, Research topics: TTVs, dynamics, N -body simulations.
- 2019 - 2021 **Mentor**, *Jesus Martinez*, Professional development mentoring organized by the AstroScholars program.
- 2019 **Mentor**, *Mine Gocken*, Physics department reading program. Surveyed the literature on cosmology and reionization together.

Teaching

- 3 semesters **Graduate student instructor**, *Astrophysics I & II*, UC Berkeley.
- 2 semesters **Undergraduate student instructor**, *Astronomy for non-majors*, UC Berkeley.