

CV — Margaret Pan

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Citizenship: USA

Research Interests

Theoretical astrophysics, including
Planetary dynamics; debris disks; extrasolar planets; small bodies, rings, and dust
in the solar system and extrasolar systems
Relativistic shocks and self-similar solutions

Education

California Institute of Technology 2001–2006
PhD in Astrophysics, 2006
Advisor: Re'em Sari
Massachusetts Institute of Technology 1997–2001
SB degrees in Physics and Planetary Science; minor in Mathematics

Research Experience

NPP Senior Fellow, NASA/Goddard Space Flight Center 2012–present
Theoretical Astrophysics/Center for Integrated Planetary Science Fellow,
Astronomy Department, UC Berkeley 2009–2012
Member, Institute for Advanced Study 2006–2009
Postdoctoral Associate, Caltech 2006
Graduate Research Assistant in theoretical astrophysics, Caltech 2002–2006
NSF REU, Harvard-Smithsonian CfA 1999–2000
Undergraduate Research Assistant in astrophysics, planetary science,
and atomic physics, MIT 1998–2001

Awards and Honors

George Ellery Hale Fellowship (Caltech) 2001–2005
NSF Graduate Research Fellowship 2001–2004
Malcolm Cotton Brown Award (MIT Physics) 2001
Phi Beta Kappa (MIT) 2001
National Merit Scholar 1997

Teaching Experience

Mentoring graduate student Erika Nesvold on her debris disk collisional code and understanding the model disk output it produces	2012–present
Mentored visiting graduate student Kartik Kumar who works on moon/ring interactions; advised on numerical simulation setup, test cases, ways to estimate expected results and check code output	2011
Co-organizer of graduate seminars ‘Rocky and Icy Planets’, ‘Planets and Life’, ‘Exoplanet Physics’, and ‘Planetary Dynamics’, UC Berkeley Astronomy Dept. Duties included planning syllabi, leading class discussions, and assisting with problem set creation.	2009–2011
Teaching assistant, Caltech Duties included grading problem sets and preparing solutions; holding office hours, problem sessions, and telescope lab sessions; and giving occasional lectures. Planetary Dynamics (graduate) Cosmology and Galaxy Formation (graduate) Galaxies and Cosmology (undergrad) Basic Astronomy and the Galaxy (undergrad)	2002–2004
Teaching/lab assistant, Observing Stars and Planets (undergrad), MIT	1999–2001

Proposals/Funding

- Co-I, “Who Stirs the Pot? Dynamics of Edge-on Debris Disks”, *ALMA* Cycle 1 (2012), PI Prof. Meredith Hughes
- NASA NPP Senior Fellowship (2012)

Professional Affiliations/Service

Member, American Astronomical Society	1999–present
Graduate Admissions Committee, Caltech Astrophysics	2003
Referee, <i>AJ</i> , <i>ApJ</i> , <i>Icarus</i> , <i>Earth, Moon & Planets</i>	2005–present
Colloquia planning/organization/hosting, IAS Astrophysics	2007–2009
Informal popular presentations for the IAS community and Berkeley elementary school students	2008–present
Exoplanet seminar organizer/host, NASA Goddard	2012–present
Panel reviewer for Astronomy/Astrophysics grants (National Science Foundation) and Aristeia-II (Greece)	2013

Other Skills

- Languages: English (native), French (reading/writing/some speaking ability), Mandarin Chinese and Taiwanese (some speaking ability)
- Freelance carillonneur; solo concerts in USA/Europe.