

# CURRICULUM VITAE

Smadar Naoz

January 2024

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## CONTACT INFORMATION

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Department of Physics & Astronomy  
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## RESEARCH INTERESTS

Dynamics of multi-object systems, including planetary, stellar, and black hole systems, globular clusters, spiral structures, compact objects, etc. Gravitational wave merger, cosmology, structure formation in the early Universe, reionization, and 21cm fluctuations.

## EDUCATION

**Tel Aviv University**, Tel Aviv, Israel  
Ph.D. in Physics, January 2010  
**Hebrew University of Jerusalem**, Jerusalem, Israel  
M.S. in Physics, Magna Cum Laude, 2004  
B.S. in Physics 2002

## POSITIONS

**University of California, Los Angeles**  
Professor of Physics & Astronomy *since July 2023*  
Howard & Astrid Preston Chair in Astrophysics *since July 2023*  
Associate professor of Physics & Astronomy *2019 – 2023*  
Howard & Astrid Preston Term Chair in Astrophysics *since 2018 - 2023*  
Assistant professor of Physics & Astronomy *2014-2019*

**Harvard Smithsonian CfA, Institute for Theory and Computation**  
Einstein Fellow, *September 2012 – June 2014*  
ITC Fellow, *September 2011 – August 2012*

**Northwestern University, CIERA**  
CIERA fellow and IAU Gruber fellow, *September 2010 – August 2011*  
CIERA fellow and Postdoctoral associate in theoretical astrophysics, *January 2010 – August 2010*

## SCHOLARSHIPS HONORS AND AWARDS

**Fellow of the American Physical Society**, 2022  
**Scialog fellow**, and accepted proposal, Signatures of Life in the Universe, 2020/2021\*  
\* *Conference postponed to 2021 due to COVID-19*  
**Helen B. Warner Prize**, awarded by the American Astronomical Society, 2020  
**Career Commitment to Diversity, Equity and Inclusion Award**, given by UCLA Academic Senate 2019. For other diversity awards, see §DEI.  
**Howard & Astrid Preston Term Chair in Astrophysics**, UCLA department of Physics and Astronomy, 2018  
**Hellman Fellows Award**, awarded by Hellman Fellows Program, aimed to support the research of promising Assistant Professors who show capacity for great distinction in their research, June 2017  
**Multiple departmental teaching awards** 2015-2021, see §Teaching, for details  
**Sloan Research Fellowships** awarded by the Alfred P. Sloan Foundation, 2015  
**Annie Jump Cannon Prize** awarded by the American Astronomical Society, 2015  
**The pH Lecture** for the Observatory's outstanding young scientists awarded by the Hertelendy

family of California and the CfA, 2014

**Einstein Fellowship**, awarded by NASA, Sept. 2012

**ITC-Harvard prize Fellowship** awarded by Harvard University – Smithsonian CfA and the Institute for Theory and Computation (ITC) Sept. 2011

**The Gruber Foundation Fellowship**, awarded by the International Astronomical Union (IAU) and the Gruber Foundation, Sept. 2010 – Aug. 2011

**The National Postdoctoral Award Program for Advancing Women in Science**, awarded by Weizmann Institute of Science, Israel, 2009 – 2011

**Dan David Prize Scholarship**, awarded by the Dan David Foundation, Sept. 2009

**John Bahcall Graduate Student Prize**, awarded by Tel Aviv University, 2008

**Ilan Ramon Award**, awarded by Commercial & industrial club house, Israel, 2007

**Don and Sara Marejn Scholarship Fund**, Tel Aviv University, 2007

**School of Physics and Astronomy award for outstanding achievements**, awarded by Tel Aviv University, 2006

**M.Sc Magna Cum Laude**, Hebrew University of Jerusalem 2004

**The Rector's Prize for excellent Master's students**, awarded by Hebrew University (top 5% in the science studies), 2004

**The Arnold Rosenblum Prize for outstanding achievement as a graduate student in Astrophysics**, awarded by Hebrew University, 2003

## MENTORING

### UCLA

#### *Current Postdoc*

**Erez Michaely** September 2021 – present

#### *Former Postdocs*

**Santiago Torres**, October 2020 – August 2023; Now a Marie Curie fellow

**Brenna Mockler** August–December 2022, UC Chancellor fellow; Now a Carnegie fellow.

#### *Current Graduate Students*

**Grant Weldon**, June 2023 – present

**Zeyuan Xuan**, October 2021 – present

**Claire Williams**, August 2021 – present

**Elizabeth (Liz) Holzknecht**, July 2020 – present

**Denyz Melchor**, July 2020 – present

**William Lake**, January 2020 – present

**Isabel Angelo**, October 2019 – present

**Thea Faridani**, October 2019 – present

#### *Former Graduate Students*

**Sanaea Rose**, August 2017 – August 2023; Now a CIERA fellow at NU

**Bao Minh Hoang**, September 2016 – June 2022; Now a Orbital Trajectory Specialist at Kall Morris Inc.

**Jesus Salas**, April 2016 – May 2021; Now UCLA lecturer and Harvard-Westlake School faculty

**Yeou Chiou**, January 2017 – August 2020; Now Machine Learning Engineer at LinkedIn

**Alexander P. Stephan**, August 2014 – August 2020; Now an OSU Presidential fellow and Buckeye Prize Postdoctoral Fellow

**Juan Pablo (JP) Gatica**, Physics-Bridge program first-year mentor, 2018-2019 academic year

**Kristian Barajas**, Physics-Bridge program first-year mentor, 2018-2019 academic year

**Mason MacDougall**, August 2018 – 2019

**Alec Vinson**, August 2014 – October 2014

*Undergraduate Students*

**Lauren Harvey** Summer 2023 – present  
**Brayan Hernandez** Winter 2023 – present  
**Nicholas Inzunza** Winter 2023 – present  
**Cheyenne Shariat** Fall 2022 – present  
**Carlos Jurado** Spring 2022 – present  
**Nitya Ravi** Summer 2021 – Summer 2022  
**Melodie Sloneker** Winter 2020 – Summer 2022  
**Cuc Dinh** Winter 2020 – July 2021  
**Eric Zhang** Summer 2019 – August 2021  
**Huiyi (Cheryl) Wang** Summer 2019 – July 2021  
**Lingfeng Wei** Cross-disciplinary Scholars in Science and Technology (CSST), UCLA summer program with China and Japan, July – August, 2018  
**Igor Van Der Put**, June 2017 – summer 2019  
**Shelley Cheng**, January 2017 – summer 2020  
**Daria Bonds** CSUSM – *Cal-bridge Undergraduate Student*, September 2020 – summer 2022  
**Joseph Soliz**, CSULB – *Cal-bridge Undergraduate Student*, September 2019 – summer 2020  
**Becky Flores** CSUN *Cal-bridge Undergraduate Student*, September 2017 – summer 2019  
**Joseph Guzman**, REU (summer 2016) and CSLB - *Cal-bridge Undergraduate Student* June 2015 – August 2017  
**Paul Denham**, June 2016 – summer 2018  
**Isabella Goetting**, November 2016 – summer 2018  
**Cicero-Xinyu Lu**, November 2014 – August 2017  
**Ahmed Qureshi**, January 2016 – August 2017  
**Bao Minh Hoang**, August 2014 – August 2016  
**Andrew Kaiser**, REU, June – August 2015  
**Erika Holmbeck**, Post-baccalaureate Student, September 2014 – August 2015

Harvard University

*Graduate Students*

**Cristina Popa**, Aug. 2014 – 2016; Now quantitative researcher at Two Sigma Investments  
**Gongjie Li**, Sept. 2011 -2015; Now Assistant. Prof. in Georgia Tech (since Jan. 2018)

Northwestern University

*Undergraduate Students*

**Jean Teyssandier**, May 2010 – September 2011  
**Ian Lizarraga**, September 2010 – August 2011  
**Leah A. Iasaman**, REU, June – August 2011  
**Bradley Solomon**, REU, June – August 2010

FUNDING

NASA-XRP “The effects of core dilution on the tidal disruption of giant planets,” (2023-2026), Co-I (PI B. Hansen), \$400,485

NSF, “NSF-BSF: Gravitational Wave From Compact Objects at Galactic Nuclei,” (2022-2025), PI, \$437,486

Research Corporation for Science Advancement, Scialog “Methane from Nontraditional Abiotic Sources and Potential for False Biosignature Positives,” (2021-2022) PI \$55,000

NASA-ATP, “Shining Light on Supersonically Induced Gas Objects,” (2020-2023) PI, \$947,943

NASA-ATP, “Binary Dynamics at the Hearts of Galaxies,” (2020-2023) PI, \$419,742

NASA-ATP, “Debris Disk Morphology due to Stellar Encounters,” (2020-2023) Co-I (PI: G. Li, Georgia Tech) - UCLA portion: \$120,006

NASA-LSP, “Multi-messenger Astronomy: Forecasting LISA Events with LIGO Detections and Electromagnetic Counterparts,” (2019–2021), PI \$167,494

NSF, “Planets around evolved binary stars,” (2018-2021), PI \$409,000

XSEDE Research Allocation, January 2021 (estimated value \$14,078.50)

XSEDE Research Allocation, April 2020, PI (estimated value \$21,027.60)

XSEDE Research Allocation, April 2019–2020, PI (estimated value \$12,086.74)

XSEDE Startup Allocation, April 2017, PI (estimated value \$2,294)

Hellman Fellows Award, Sept. 2017 - July 2018, \$20,000

Keck foundation (2016-2021), \$1M (Collaborator Naoz’s part ~\$65k, PI, A. Ghez)

Sloan Research Fellowships 2015-2017 \$50,000

UCLA developmental award 2015 \$5k

UC-HiPACC - 2014 \$10,000

SERVICE AND  
LEADERSHIP  
(SELECTED):  
*Leadership  
italicized*

**In the community:**

Referee for the American Astronomical Society Journal, Monthly Notices of the Royal Astronomical Society, Journal of Cosmology and Astroparticle Physics, Astronomy & Astrophysics (A&A), Celestial Mechanics, *Nature*, *Science*, *Physics Review Letters*, *PRL* and *PNAS*.

*Chair of the American Astronomical Society (AAS) Division on Dynamical Astronomy (DDA) (planned, 2024-2025)*

*Vice-Chair of the American Astronomical Society (AAS) Division on Dynamical Astronomy (DDA) (2023-2024)*

*An elected Committee member at large in the American Physical Society (APS) Far West Section Since March 2022*

*An elected member of the Division Committee in the American Astronomical Society (AAS) Division on Dynamical Astronomy (DDA), July 2018 – July 2021*

The Heising-Simons Foundation 51 Pegasi b fellowship external reviewer (winter 2020)

*NASA review panels:* ATP review panel, Fall 2013, Fall 2016, Fall 2021 (**Chair**); HST review panel, Spring 2016; NASA TCAN review panel, Summer 2020; NASA LSP review panel, Spring 2021; Proposal reviewer for the NASA ATP Fall 2011; NASA emerging world Summer 2018

National Science Foundation (NSF) review panel, Spring 2013, Winter 2018

Keck Telescope TAC member, 2022 – present

*Steering committee member* (Summer 2015 – Dec. 2016) and a mentor at the Cal-bridge program since 2015

(see <http://www.cpp.edu/~sci/physics-astronomy/research/cal-bridge.shtml> )

BSF: United States - Israel Binational Science Foundation reviewer, winter 2017

UK-RI Future Leaders Fellowships, Summer 2020

The Netherlands Organisation for Scientific Research, reviewer, 2016, 2018, 2020

\* for conference organizations, see below.

**Editorial roles:**

Invited Scientific Editor for *Nature Scientific Reports* (online journal in all areas of natural sciences by the Nature Publishing Group), July 2014 – 2020

Science Editor, The American Astronomical Society's *The Astrophysical Journals*, January 2024 – present

**In UCLA:**

*Chair of Physics and Astronomy diversity committee, UCLA, Fall 2020 – present*

*Chair of Astro-diversity committee, UCLA, Spring 2016 – Fall 2020*

*Chair of Physics-diversity committee, UCLA, Jan. 2017 – Fall 2020 (leading the formation of APS - bridge program)*

Member of the Physical Sciences Diversity Committee, UCLA, Summer 2016 – present

Member of the Senate Committee on Diversity, Equity, and Inclusion (CODEI), Fall 2020 – present

Member of UCLA appointment committee 2017 – present

Admission committee, Fall 2022 – present (DEI officer in the admission committee since Fall 2019)

*Chair of the recruitment committee Fall 2019 – present*

UCLA Hellman Fellows panelist (summer 2020,2023), URSP reviewer (2019,2022), UC presidential fellowship reviewer (winter 2019, 2022), Eugene V. Cota-Robles Fellowship reviewer (winter 2023)

Search committees: EPSS Slichter chair search committee (2016-2017), Astronomy search committee (2018), Plasma search committee (2019-20), Experimental physics/ mentoring search (2020-2021)

Physics Comprehensive exam reform committee 2019/20, and 2022/23

Physics Bridge admission committee 2018, 2019, 2020, 2021, 2023

UCLA's Division of Astronomy and Astrophysics **grad adviser representative** and coordinator of Graduate students and postdocs mentoring program, Sept. 2015 – 2018

*The organizer of the Bhaumik Luncheon seminar, 2017–2019*

*Member of the executive committee of the Mani L. Bhaumik Institute for Theoretical Physics at UCLA, Summer 2016 – present*

—it Member of the leadership committee of the Galactic Center Group, Fall 2014 – present

UCLA's Physics and Astronomy department graduate affairs and academic affairs committees, Sept. 2016 – 2018

Member of UCLA's Astronomy Colloquium Committee, July 2014 – present (*chair* since 2018)

**In the ITC/CfA - Harvard:**

ITC Postdoctoral Fellowship Selection Committee, Fall 2012, 2013

Member of the ITC Seminar and Colloquium and visitor committee, 2012- 2014 (chair 2013, 2014)

*Co-Organizer of the ITC-Pizza lunch about Star formation and stellar dynamics, spring 2012*

Member of the ITC postdoctoral fellowship selection committee, 2013, 2014

Organizer of the *Astronomy for Everyone* workshop for high schoolers with dyslexia, ADHD, and autism spectrum disorders, CfA April 2014

**In CIERA - Northwestern:**

*Organizer of the CIERA (Northwestern) theory group meetings 2010–2011*

*Co-Organizer of the CIERA (Northwestern) Secular Dynamics Reading Group 2010*

**In Tel-Aviv University:**

*Organizer and founder of the Tel Aviv University Astrophysics Reading Club* (reviewing important papers in the literature), 2008 - 2009

*Organizer of the Tel Aviv University student seminar, 2007–2009*

Tel-Aviv University Astronomy Club, outreach endeavor, 2006–2011

”BASHAAR club for youth”: giving public lectures in schools and high schools (involving lectures focused on engaging woman and minorities in science), 2006 – 2009

CONFERENCE  
ORGANIZING

Organizer and SOC chair, The 55th Annual Meeting - Toronto, Ontario, Canada, May 12-17 in Toronto, Ontario, Canada

Co-organizer of “Theories of the three-body system,” conference at Jerusalem, Israel, Oct. 2023

SOC for “MODEST-23,” Evanston, IL, August, 2023

SOC for “Galactic Center Workshop 2023,” Granada, Spain, April 2023

SOC for “Astrophysics in the Next Decade: From the First Stars to Intelligent Life A meeting in celebration of Avi Loeb’s 60th birthday,” June 2022 (in person)

Co-organizer of 2022 Aspen winter conference, “Dynamical Formation of Gravitational Wave Sources,” January, 2022 (in person)

SOC for the Trendy 3 conference on triples, March 2021

SOC for the Division on Dynamical Astronomy *51 meeting, August 2020; 52 meeting, May 2021*

SOC for Extreme solar system - *III Hawaii, Nov-Dec 2015, IV Iceland, August 2019, V New Zealand, March 2023*

SOC for MorrisFest, September, 2019

PI of the 2016 Aspen winter conference “Dynamics and accretion at the Galactic Center”, Feb. 2016

Organizer of UCLA AstroBash - The Division of Astronomy and Astrophysics show and tell. Dec. 2015, Oct. 2016, Sept. 2017, Oct. 2018, Nov. 2019, Nov. 2020, Nov. 2021

SOC ExSoCal, September, CA 2017

LOC and SOC of the Conference for Undergraduate Women in Physics (CUWiP), UCLA, January 2017

LISA Symposium International Advisory Board, Chicago, August 2018

Co-organizer of the “Inclusive Astronomy Meeting”, June 2015, Vanderbilt University, Nashville,

Tennessee (see <https://vanderbilt.irisregistration.com/Home/Site?code=InclusiveAstronomy2015>)

Co-Organizer and SOC of the CIERA (Northwestern) Inaugural conference, “The Future of Astronomy: Fellows at the Frontiers of Science,” Sept. 2011

Co-founder and co-organizer of the Israeli astrophysics and cosmology students conference series (AsCoS): AsCoS I (2008, Weizmann Institute); AsCoS II (2009, Tel Aviv university)

## TEACHING

**Multiple outstanding teaching awards**, for Astro-286, exoplanets, *Winter 2015*, and for Phys-105A, analytical mechanics, *Winter 2016, 2019, 2020, 2021*, for Astro-270, Astro-dynamics class, *Fall 2022*, and **teacher of the year award**, for Astro-273, Phys-105A, Phys-1B and novel contribution to student mentoring, 2015-2016 academic year, awarded by UCLA Department of Physics and Astronomy

Astro-270 Astrophysics Dynamics, Core graduate level course, UCLA (Fall 2016, Fall 2018, Fall 2020, Fall 2022)

Astro-273/280 Diffuse Matter in Space/Fluid dynamics in Astrophysics, Core graduate level course UCLA (Fall 2015, 2017, 2019, 2021, 2023)

Physics 105A Analytical mechanics, upper-division undergraduate level core course, UCLA (Winter 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024)

Physics 105B Analytical mechanics, upper-division undergraduate level core course, UCLA (Spring 2022, 2023 )

Physics 1B, electromagnetism and wave, core lower-division undergraduate level course, UCLA (Spring 2015, 2016)

Astro-286 Exoplanets, Graduate elective course, UCLA (Winter 2015, Spring 2021)

Guest Lecture, Exoplanet Graduate course, Harvard University (Spring 2013)

Guest Lecture, EPS 351 Graduate course, Northwestern University (Spring 2011)

Guest Lecture, GR Graduate course, Northwestern University (Spring 2011)

Teaching assistant, undergraduate astrophysics course at the Tel Aviv University in the (Spring 2007)

Teaching assistant at the Hebrew University of Jerusalem responsible for the CAPA system (computerized exercise system), 2002 – 2004

Teaching assistant at the Hebrew University of Jerusalem (during my B.Sc), involving grading exercises and tutoring in the physics club, 2001

Lecturer (E&M course in the Fall semester and calculus in the Pre-academic summer program) and teaching assistant in physics and mathematics at the Jerusalem College of Engineering (I received one of the highest ratings by students at that college) 2000 – 2002

Teaching assistant in mathematics, PERAH Scholarship program, at the Hebrew University of Jerusalem, 1999-2000

## OUTREACH, DIVERSITY, EQUITY AND INCLUSION (SELECTED)

**Career Commitment to Diversity, Equity and Inclusion Award**, given by UCLA Academic Senate *2019*.

**UCLA Department of Physics and Astronomy contribution for diversity award**, given as recognition for efforts to diversity and inclusion, *2017, 2018*

Chair (and initiator) of Physics and Astronomy diversity committee, UCLA, a consolidation of the Astro-DEI committee (Spring 2016 – Fall 2020) and Physics-DEI committee (Jan. 2017 – Fall 2020), –present, (*notably: leading the formation of APS - bridge program - First cohort began on Fall 2018*)

Chair of Physics-diversity committee, UCLA, Jan. 2017 – Fall 2020 (*notably: leading the formation*

*of APS - bridge program - First cohort began on Fall 2018)*

Member of the Physical Sciences Diversity Committee, UCLA, Summer 2016 – present

Member of the Senate Committee on Diversity, Equity, and Inclusion, Fall 2020 – present

Steering committee member (Summer 2015 – Dec. 2016) and a mentor at the Cal-bridge program since 2015

(see <http://www.cpp.edu/~sci/physics-astronomy/research/cal-bridge.shtml> )

Faculty advisor for Women in STEM (WiSTEM): Breaking Barriers at UCLA, since Oct. 2021

### **DEI Talks/Seminars/Contributions/Organizations and Panels Participations**

An organizer of multiple events that advocate for diversity equity and inclusion. These events range from departmental events (such as anxiety in Graduate School workshop, APS climate visit, Sherard Robbins from Visceral Change day visit about DEI efforts in hiring and admission, organizing mentoring workshop with Shanna Shaked, leading the monthly DiversiTea community discussion - in collaboration with Sanaea Rose - and the 11 weeks summer DiversiTea journal club - in collaboration with Alice Shapley - etc.) as well as physical division and university-wide and physical division wide events such as, Mahzarin Banaji (Harvard) implicit bias talk, and picture a scientist movie screening and discussion.

Mentoring Practices (for mentors and mentees) workshop presentation, 2018 (with Shanna Shaked), 2020, 2021, 2023

Exploring Your Universe (EYU), UCLA's annual outreach event, 2019,2020,2021 (booth), 2015,2022,2023 (talks)

Transfer students in UCLA physical science discussion, Academic Advancement Program (AAP), TSP, September, 2023

Summer BRIDGE Talk, UCLA physical science bridge, September, 2023

DEI panel, Northwestern, Evanston, IL, August, 2023

Women in STEM Seminars, Scarsdale High School, NYC, August, 2022 (virtual)

Co-organizer of California's fUtUre sCIence lEAders (CURIE), PHysics & AStronomy for EveRyone (PHASOR) event for high school kids, May, 2022

Aspen Science Center Physics Cafe Presenter, January, 2022

Astronomy on Tap, outreach, popular talk, Zoom/Youtube Fall 2021

PEERS talk (UCLA's largest academic support program for STEM majors from underrepresented and underserved backgrounds), April 2021

ComSciCon-LA 2021 Workshop panelist on DEI efforts, April 2021

Visceral Change Women's Leadership Panel, March, 2021

UCLA Undergraduate Research Fellows Program (URFP) panel, February, 2021

Lamat talk at Meetings of the Minds seminar series, UCSC - virtual talk, July 2020 (Lamant program is aimed at community college students in CA)

UCLA's Career Center, Academic Faculty Panel, September 2019

Plenary talk at the Conference for Undergraduate Women in Physics (CUWiP), January 2019

Panelist in the Conference for Undergraduate Women in Physics (CUWiP), January 2017, 2018, 2021

LOC of the Conference for Undergraduate Women in Physics (CUWiP), UCLA, January 2017

Co-organizer of the "Inclusive Astronomy Meeting", June 2015, Vanderbilt University, Nashville,



Tennessee (see <https://vanderbilt.irisregistration.com/Home/Site?code=InclusiveAstronomy2015>)

Guest lecture in *Exploring Your Universe!* UCLA's outreach program Nov. 2014, panel and booths: 2019, 2020, 2021

Organizer of the *Astronomy for Everyone* workshop for high schoolers with dyslexia, ADHD, and autism spectrum disorders, CfA April 2014

CfA Career workshops for young people who think differently: summer workshop for young people with dyslexia, ADHD, and autism spectrum disorders, CfA, June 2013

Tel Aviv University Astronomy Club. Involving general public activities as well as writing and expanding the "Astropedia" - the Hebrew encyclopedia of space science, 2006-2011 (I continued to be an active member well within my postdoc years)

"BASHAAR club for youth": giving public lectures in schools and high schools (involving lectures focused on engaging woman and minorities in science), 2006 - 2009

An instructor in a physics lab at the "Belamonte science center for Youth" at the Hebrew University of Jerusalem, 2000 - 2001

An instructor (and activities developer) at the Bloomfield science museum in Jerusalem (which includes engaging woman and minority in science, among the regular activities), 1999 - 2002

An instructor in an after-school Astronomical curriculum activity for kids in grades 1-3 at the "Ramat-Sharet" *community center*, 1999-2000

PERAH Scholarship program for adults to complete high school diploma at the Hebrew University of Jerusalem 1999-2000

INVITED TALKS AND  
PRESENTATIONS  
(SELECTED)

**Physics colloquium:** University of Tokyo, Tokyo, Japan, December 2023

RESCEU-NBIA workshop on gravitational-wave sources, Tokyo, Japan, December 2023

**Astronomy Colloquium:** Indiana University, Bloomington, November 2023

**Astronomy Colloquium:** University of Washington, Washington, November 2023

**Physics Colloquium:** University of San Francisco, Virtual, October 2023

“MODEST-23, the 21st workshop on Modeling and Observing DENSE STellar systems,” Northwestern University, Evanston, IL, Aug-Sept. 2023

“Black Hole Initiative 2023 Annual Conference,” Cambridge, MA, May 2023

“eXtreme Black Holes,” Aspen, March 2023

**Astronomy Colloquium:** Georgia Tech, Atlanta, Georgia, January 2023

“Unsolved Problems in Astrophysics and Cosmology, 2022,” Jerusalem, Israel, December 2022 (invited talk)

“2022 MIAPP program ”Star-Forming Clumps and Clustered Starbursts across Cosmic Time,” Garching, Germany, October 2022 (Wrap-up talk)

“2020 GMT Community Science Meeting - Black Holes at All Scales,” Tucson, AZ, September 2022 (**invited review talk**)

“Mani-Fest 2022: Directions in Theoretical Physics,” UCLA, California, June 2022 (invited talk)

“Astrophysics in the Next Decade: From the First Stars to Intelligent Life A meeting in celebration of Avi Loeb’s 60th birthday,” Martha’s Vineyard Edgartown, Massachusetts, June 2022 (invited talk)

Intermediate-mass black holes, New Science from Stellar Evolution to Cosmology, Puerto Rico, May 2022 (invited talk)

**Astronomy Colloquium:** McGill Space Institute, McGill University, Montreal, Canada, virtual talk, September 2021

RESCEU summer school 2021 (virtual meeting), Tokyo, Japan, August 2021 (invited lecturer)

Niels Bohr Institute Summer school on Gravitational Waves, Copenhagen, Denmark, August 2021 (invited lecturer, virtually)

**Astronomy Colloquium:** The Universidad de Concepción, Chile, virtual talk, July 2021

Division on Dynamical Astronomy 52 meeting - American Astronomical Society, Virtual meeting, May 2021 (SOC)

**Physics Colloquium** Max Planck Institute for Gravitational Physics AEI, (Albert Einstein Institute, AEI), Germany, virtual talk, May 2021

**Astronomy Colloquium:** University of Hong Kong, virtual talk, April 2021

TRiple Evolution and Dynamics (TRENDY) 3, Virtual meeting, March 2021, (**plenary talk**)

Georgia Tech, virtual talk, March 2021

American Astronomical Society 237, Virtual meeting, January 2021, (**Helen B. Warner Award plenary talk**)

**Astrophysics Colloquium** Stanford/KIPAC virtual talk, November, 2020

American Physical Society, The Far West Section, Virtual meeting, October 2020 (**invited plenary talk**)

Exploring Supermassive Black Holes, Virtual meeting (Princeton IAS originally), October 2020 (invited talk)

**Astronomy Colloquium:** MIT, virtual talk, October 2020

KITP program "Probing Effective Field Theories of Gravity in Strong Fields and Cosmology," Virtual meeting, September 2020 (invited panelist in Mixing scales and combining observation session)

Division on Dynamical Astronomy 51 meeting - American Astronomical Society, Virtual meeting, August 2020 (SOC)

Lamat talk at Meetings of the Minds seminar series, UCSC - virtual talk, July 2020

**Physics colloquium** USC, Los Angeles, California, September, 2019

Extreme Solar Systems IV Reykjavik, Iceland, August 2019 (invited talk)

Advancing Theoretical Astrophysics summer school, Amsterdam, The Netherlands, July 2019 (invited teacher)

**Astronomy Colloquium:** Caltech, Pasadena, California, May 2019

Planet-Star Connections in the Era of TESS and Gaia, KITP, Santa Barbara, May 2019 (invited talk)

The Conference for Undergraduate Women in Physics (CUWiP), January 2019 (**Plenary talk**)

**Astronomy Colloquium:** University of Washington, Washington, January 2019

**Astronomy Colloquium:** Caltech, Pasadena, California, December 2018

**Astronomy Colloquium:** University of Colorado, Boulder, Colorado, December 2018

**Astronomy Colloquium:** University of Texas, Austin, Texas, October 2018

**Astronomy Colloquium:** New York University, Astronomy colloquium, NY, September 2018

Triple Evolution and Dynamics, Lorentz Center, Leiden, Netherlands, September 2018 (invited opening talk)

Open Questions in Astrophysics, Niels Bohr Institute, Copenhagen, Denmark, July 2018 (invited talk)

Gravitational Wave Astrophysics, Sackler Conference, Harvard, ITC, May 2018 (invited talk)

**Astronomy Colloquium:** University of California Riverside, Physics colloquium, CA, May 2018

**Astronomy Colloquium:** University of California Santa Barbara, Astrophysics colloquium, CA, April 2018

**Astronomy Colloquium:** University of Florida, Gainesville, Astrophysics colloquium, FL, April 2018

**Astronomy Colloquium:** Yale University, New Haven, Astrophysics colloquium, CT, February, 2018

Stellar Dynamics in Galactic Nuclei,” Princeton, IAS, November 2017 (invited talk)

**Colloquium** Center for Computational Astrophysics, Flatiron Institute, NY, September 2017

**Physics colloquium** Cal-Poly Pemona, CA, May 2017

**ITC colloquium** Harvard/CfA - ITC, Cambridge, MA, March 2017

**Astronomy Colloquium:** Northwestern CIERA, IL January 2017

**Astronomy Colloquium:** Carnegie observatories, CA September 2016

**Astronomy Colloquium:** Columbia University, NY September 2016

**Physics & Astronomy colloquium** California State University, Northridge, Northridge, CA, August 2016

**Astronomy Colloquium:** University of California, Santa Cruz, CA, May 2016

**Astronomy Colloquium:** University of Michigan, MI, April 2016

**Physics & Astronomy colloquium** California State University, Long Beach, Long Beach, CA, February 2016

Dynamics and accretion at the Galactic Center,” Aspen Colorado, February 2016 (PI)

American Astronomical Society 227, Kissimmee, Florida January 2016 (**Annie Jump Cannon Award plenary talk**)

Extreme Solar Systems III, Waikoloa Beach, Hawaii December 2015 (invited talk)

Astrophysics of Dark Matter,” Institute for the Physics and Mathematics of the Universe (Kavli IPMU), The University of Tokyo, Kashiwa, Chiba, Japan, October 2015 (invited talk)

IAU general assembly, Honolulu, Hawaii, Aug 2015 (invited talk)

Sagan Summer Workshop on Exoplanetary System Demographics: Theory and Observations, Pasadena, California, July 2015 (**invited overview talk**)

**Astronomy Colloquium:** Canadian Institute for Theoretical Astrophysics, University of Toronto, Canada, May 2015

**Astronomy Colloquium:** University of Arizona, Arizona, USA, April 2015

**TAC seminar** University of California, Berkeley, CA, USA, November 2014

**Astronomy Colloquium:** UCI, Irvin, October 2014

**CfA Colloquium** Harvard/CfA, Cambridge, MA, 2014

**IAS seminar** Princeton, NJ, April 2014

**Physics seminar** University of Maryland, College Park, MD, November 2013

**Astronomy Colloquium:** UCLA, CA, April 2013

**Physics Colloquium** MIT, Cambridge, MA, March 2013

Exoplanets in Multi-body Systems in the Kepler Era,” Aspen, CO, February 2013 (invited talk)

**Astrophysics Colloquium** UMass Amherst, MA, USA, January 2013

Exoplanets and Binaries: CoRoT and Kepler Mission Results, and Future Challenges,” Tel Aviv, Israel, December 2012 (invited talk)

**Astrophysics Colloquium** The Ohio State University, OH, November 2012

**TASC FLASH Seminar** University of California Santa Cruze, CA, USA, October 2012

**Astrophysics seminar** University of California Santa Barbara, Santa Barbara, CA, October 2012

**Astrophysics Colloquium** Rochester University, NY, USA, September 2012

**Astrophysics Colloquium** Cornell, NY, USA, September 2012

**Tapir Seminar** Caltech, CA, USA, March 2012

**Astrophysics Colloquium** University of California, Berkeley, Berkeley, CA, March 2012

**Astrophysics Seminar** Boston University, MA, USA, October 2011

Extreme Solar Systems II, Jackson Hole, WY, September 2011 (invited talk)

**Astronomy seminar** Fermilab, Chicago, IL, May 2011

“Hydrogen Cosmology Workshop,” Cambridge, MA, USA, May 18 – 20, 2011 (invited talk)

**ITC colloquium** Harvard/CfA - ITC, Cambridge, MA, March 2011

**Astronomy seminar** MIT, Cambridge, MA, March 2011

CosmoFirstObjects: International Meeting on High-z Cosmology,” Marseille, French, May 3 – 6, 2011(invited talk)

**Astronomy seminar** Weizmann institute, Astrophysics Seminar, Israel, October 2010

**Astronomy seminar** Northwestern University, Evanston, IL, October 2010

AU Symposium 276 The Astrophysics of Planetary Systems: Formation, Structure, and Dynamical Evolution,” Torino, Italy, October 11 – 15, 2010 (talk)

10th Great Lakes Cosmology Workshop,” Chicago, IL, June 2010 (talk)

Aspen Winter Conference on Astrophysics The High Redshift Universe: A Multi- Wavelength View,” Aspen, Colorado, February 2010 (talk)

**Astrophysics Seminar** University of Chicago, Seminar, IL, Chicago, January 2010

**Astrophysics Seminar** Technion, Haifa, Israel, October 2009

**Astrophysics Seminar** The Hebrew University of Jerusalem, Jerusalem, June 2009

**Astrophysics Colloquium** The Institute for the Physics and Mathematics of the Universe (IPMU), University of Tokyo, Seminar, Kashiwa, Japan, May 2009

Haifa workshop on cosmology and optimal transport,” Haifa, Israel, March 2009 (talk)

**Astrophysics Seminar** Weizmann institute, Rehovot, Israel, March 2009

The 53st Annual Meeting of the Israel Physical Society,” Be’er Sheva, Israel, December 2008 (talk)

**Astrophysics Seminar** Tel Aviv University, Tel Aviv, Israel, December 2008

**Tapir Seminar** Caltech, Pasadena, California, October 2008

**Astronomy seminar** UC Berkeley, Berkeley, California, September 2008

**Astronomy seminar** Princeton University, Princeton, New Jersey, September 2008

**ITC seminar** ITC CfA/Harvard, Cambridge, MA, October 2008

Galaxy Evolution workshop, Jerusalem, Israel, June 2008 (talk)

“HI Survival through Cosmic Times,” Tuscan, Italy, June 11 – 15, 2007 (talk)

The 52st Annual Meeting of the Israel Physical Society, Israel, December 2006 (talk)

Aspen Winter Conference on Astrophysics, Cosmological Probes of Baryons and Dark Matter,” Aspen, Colorado, January 2006 (talk)

The 51st Annual Meeting of the Israel Physical Society,” Israel, December 2005 (talk)

International School of Cosmic Ray Astrophysics 14th Course on Neutrinos and Explosive Events in the Universe,” Erice, Sicily, Italy, July 2004 (talk)

## PUBLICATIONS

*Total of 109 papers, 27 first-author, 52 second-author, more than six thousand citations, h-index=37 (ADS, Google Scholar)*

*†Papers led by my mentees*

†Xuan, Z.; **Naoz, S.**; Kocsis, B.; Michaely, E., “Detecting Gravitational Wave Bursts From Stellar-Mass Binaries in the Milli-hertz Band,” 2024, submitted to The Astrophysical Journal, arXiv:2310.00042

†Michaely, E., **Naoz, S.**, “New Dynamical Channel: Wide Binaries in the Galactic Center as a Source of Binary Interactions,” 2024, submitted to The Astrophysical Journal, arXiv:2310.2558

†Jurado, C.; **Naoz, S.**; Lam, C. Y.; Hoang, B.M., “Natal Kicks from the Galactic Center and Implications on their Environment and the Roman Space Telescope,” 2024, submitted to The Astrophysical Journal arXiv:23101.7707

†Williams, C. E.; Lake, W.; **Naoz, S.**; Burkhardt, B.; Treu, T.; Marinacci, F.; Nakazato, Y.; Vogelsberger, M.; Yoshida, N.; Chiaki, G.; Chiou, Y. S.; Chen, A., “The Supersonic Project: Lighting up the faint end of the JWST UV luminosity function,” 2024, accepted to The Astrophysical Journal-Lett, arXiv:2310.03799

†Melchor, D.; Mockler, B.; **Naoz, S.**; Rose, S.; Ramirez-Ruiz, E., “Tidal Disruption Events from the Combined Effects of Two-Body Relaxation and the Eccentric Kozai-Lidov Mechanism,” 2024, The Astrophysical Journal, .960, 39

Will, C. M.; **Naoz, S.**; Hees, A.; Tucker, A.; Zhang, E.; Do, T.; Ghez, A., “Constraining a Companion of the Galactic Center Black Hole Sgr A\*,” The Astrophysical Journal, 2023, 959, 58

**Naoz, S.** & Z. Haiman, “The Enhanced Population of Extreme Mass-Ratio Inspirals in the LISA Band from Supermassive Black Hole Binaries,” 2023, The Astrophysical Journal-Lett, 955 27

Flores, M. M.; Kusenko, A.; Ghez, A. M., “G Objects and primordial black holes,” 2023, Phys. Rev. D., 108, 1301

†Zhang, E.; **Naoz, S.**; Will, C. M., “A Stability Timescale for Nonhierarchical Three-body Systems,” 2023, ApJ, 952, 103

†Shariat C.; **Naoz, S.**; Hansen, B. M. S.; Angelo, I.; Michaely, E.; Stephan, A. P., “Dynamical Evolution of White Dwarf Triples in the Era of Gaia,” The Astrophysical Journal-Lett, 955, 14

†Mockler, B.; Melchor, D.; **Naoz, S.**; Ramirez-Ruiz, E. “Uncovering Hidden Massive Black Hole Companions with Tidal Disruption Events,” 2023, The Astrophysical Journal, 959, 18

†Lake, W.; **Naoz, S.**; Marinacci, F.; Burkhardt, B.; Vogelsberger, M.; Williams, C. E.; Chiou, Y. S.; Chiaki, G.; Nakazato, Y.; Yoshida, N., “The Supersonic Project: Star Formation in Early Star Clusters without Dark Matter,” 2023, The Astrophysical Journal-Lett, .956, 7

†Faridani, T. H.; **Naoz, S.**; Li, G.; Inzunza, N., “Let’s Sweep: The Effect of Evolving J2 on the Resonant Structure of a Three-Planet System,” 2023, The Astrophysical Journal, 956, 90

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†Rose, S. C., **Naoz, S.**, Sari, R., Linial, I., “Stellar Collisions in the Galactic Center: Massive Stars,

Collision Remnants, and Missing Red Giants,” 2023, *The Astrophysical Journal* 955, 30

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†Williams, C. E.; **Naoz, S.**; Lake, W.; Chiou, Y., S.; Burkhart, B.; Marinacci, F.; Vogelsberger, M.; Chiaki, G.; Nakazato, Y.; Yoshida, N.; “The Supersonic Project: The eccentricity and rotational support of SIGOs and DM GHOSTs,” 2023, *The Astrophysical Journal*, 945, 6

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†Deme, B.; Hoang, B.; **Naoz, S.**; Kocsis B., “Detecting Kozai-Lidov imprints on the gravitational waves of intermediate-mass black holes in galactic nuclei,” 2020, *The Astrophysical Journal*, 901, 125

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**Naoz, S.**, Will, C. M., Ramirez-Ruiz, E., Hees, A., Ghez, A. M., Do, T., “A Hidden Friend for the Galactic Center Black Hole, Sgr A\*,” 2020 The Astrophysical Journal–Letters, 888, 8

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†Stephan, A. P., **Naoz, S.**, Gaudi, S. B., Salas, J. M., “Eating Planets for Lunch and Dinner: Signatures of Planet Consumption by Evolving Stars,” 2020, The Astrophysical Journal 889, 45

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†Chiou, Y. S., **Naoz, S.**, Burkhardt, B., Marinacci, F., Vogelsberger M., “The Supersonic Project: Shining Light on SIGOs - a New Formation Channel for Globular Clusters,” 2019, The Astrophysical Journal – Letters, 878, 23

†Salas, J. M., **Naoz, S.** Morris, M. R., Stephan, A. P., “Unseen companions of V Hya inferred from periodic ejections,” 2019, Monthly Notices of the Royal Astronomical Society, 487, 3029

†Rose, S. C., **Naoz, S.**, Geller, A. M., “Companion-driven evolution of massive stellar binaries,” 2019, Monthly Notices of the Royal Astronomical Society, .488, 2480

†Stephan, A. P., **Naoz, S.**, Ghez, A. M., Morris, M. R., Ciurlo, A., Do, T., Breivik, K., Coughlin, S., Rodriguez, C. L., “The Fate of Binaries in the Galactic Center: The Mundane and the Exotic,” 2019, The Astrophysical Journal, 878, 58 *featured in AAS NOVA*

†Hoang, BM, **Naoz, S.**, Kocsis, B., Farr, W. M., McIver, J. “Detecting Supermassive Black Hole–induced Binary Eccentricity Oscillations with LISA,” 2019, The Astrophysical Journal – Letters, 875, 31

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