

## 2023 54th Annual DDA Meeting Schedule

# 2023 54th Annual Meeting of the DDA

## Michigan State University, East Lansing MI

### Oral Presentations

All times are local time (EDT, UTC-4)

[Full abstract information is here](#). [1] but you must "login" in order to see it.

#### Sunday, May 7th

##### Opening Reception

Food and drink available for purchase

Venue: Rock Bar (top floor), Graduate Lansing East Hotel, 133 Evergreen Ave, East Lansing MI

5:00 – 8:00

#### Monday, May 8th

##### Dynamics Community Meetup

We encourage all members of the DDA to gather for pre-meeting conversations and networking. We hope this space enhances people's experience at the DDA by providing an opportunity for people with similar identities to meet and connect. Those who are underrepresented in astronomy are strongly encouraged to attend, as well as anyone interested in DEI issues.

8:20 – 8:55

##### Introduction and Announcements

Matt Tiscareno, Seth Jacobson, Dan Tamayo

SOC, LOC and DDA Chairs

8:55 – 9:00

##### 100 - Comet and TNO Dynamics

Chair: Kat Volk

Slack Chair: Aswin Sekhar

9:00 – 10:30

9:00	Yukun Huang	University of British Columbia	Steady state of a planet-scattering debris disk
9:15	Brett Gladman	University of British Columbia	Sednoid creation by scattered rogue planets
9:30	Sam Hadden	CITA	Scattered Disk Dynamics: A Mapping Approach
9:45	Santiago Torres	University of California, Los Angeles	From the Oort Cloud to Interstellar Space
10:00	Henry Dones	Southwest Research Institute	Original Orbits for Long-Period Comets Active Far from the Sun
10:15	William Bottke	Southwest Research Institute	The Size Distribution and Impact Flux of

Comets in the  
Outer Solar  
System

**Coffee Break**

10:30 – 10:45

**101 - Galaxy Dynamics 1: Spirals and Bars**

Chair: Arpit Arora

Slack Chair: Harrison Blake

10:45 – 12:15

10:45	Steven Gough-Kelly	Jeremiah Horrocks Institute, University of Central Lancashire	Modelling the Internal Evolution of Barred Galaxies (VIRTUAL)
11:00	Leandro Beraldo e Silva	University of Michigan	Orbital support and evolution of flat profiles of bars (shoulders)
11:15	Sandeep Kataria	Shanghai Jiao Tong University, Shanghai	The role of inner halo angular momentum on bar formation and evolution (VIRTUAL)
11:30	Monica Valluri	University of Michigan	Early Growing Supermassive Black Holes Strengthen Stellar Bars
11:45	Behzad Tahmasebzadeh	University of Michigan	Schwarzschild Modeling of Barred S0 Galaxy NGC4371 with TIMER Survey
12:00	Curtis Struck	Iowa State University	Extended Eccentric Resonance Regions in Galaxy Disks

**Lunch**

12:15 – 1:45

**102 - Brouwer Prize Lecture**

Chair: Dan Tamayo

Slack Chair: Matt Tiscareno

1:45 – 2:45

1:45	Hal Levison	Southwest Research Institute	Probing the Formation and Evolution of the Outer Solar System with Lucy
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**103 - Exoplanet Dynamics 1**

Chair: Yubo Su

Slack Chair: Sarah Millholland

3:00 – 4:30

3:00	Juliette Becker	Caltech	The Influence of
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3:15	Malena Rice	MIT, Yale University	Tidal Heating on the Habitability of Planets Orbiting White Dwarfs
3:30	John Zanzani	University of California, Berkeley	Orbital Geometries of Exoplanet-Hosting Multi-Star Systems
3:45	Songhu Wang	Indiana University	Are planetary systems coplanar?
4:00	Brandon Radzom	Indiana University	Hot Jupiters are not as lonely as we thought: Implications for a New Framework of Hot Jupiter Formation
4:15	Sergio Best	Pontificia Universidad Catolica de Chile	Post-disk Evolution of Short-period Gas Giants in Compact Multi-planet Systems: A Mechanism to Produce the Observed Companionship Dichotomy Between Hot Jupiters and Warm Jupiters (VIRTUAL)

### Brief Break

4:30 – 4:35

### 104 - Planetary Origins Dynamics 1

Chair: Michelle Vick

Slack Chair: David Minton

4:35 – 5:05

4:35	André Izidoro	Rice University	Very wide-orbit planets from dynamical instabilities during the stellar birth cluster phase
4:50	Raluca Rufu	Southwest Research Institute	Origin of compact exoplanetary systems via early accretion during stellar infall

### End of Sessions for the Day

**5:05**
**105 - [DDA Public Talk](#) [2]**

Venue: UrbanBeat, 1213 Turner Road, Lansing MI

6:00 – 8:00

6:00	Harrison Agrusa	Université Côte d'Azur, Observatoire de la Côte d'Azur, CNRS, Laboratoire Lagrange	The results of NASA's DART Mission and what comes next
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## Tuesday, May 9th

### Coffee and Gathering

8:20 – 8:55

### Introduction and Announcements

Matt Tiscareno, Seth Jacobson, Dan Tamayo

SOC, LOC and DDA Chairs

8:55 – 9:00

### 200 - Galaxy Dynamics 2: Black Holes and Dark Matter

Chair: Curtis Struck

Slack Chair: Eric Bell

9:00 – 10:45

9:00	Harrison Blake	Ohio State University	Dynamics of Extreme Mass Ratio Inspiral Resonance Scenarios
9:15	Zhaozhou Li	The Hebrew University of Jerusalem	Modeling the formation of dark-matter deficient galaxies (VIRTUAL)
9:30	Denis Erkal	University of Surrey	The OC stream's evolution in the dark matter haloes of the Milky Way and the LMC (VIRTUAL)
9:45	Frank van den Bosch	Yale University	On the Tidal Evolution of Dark Matter Substructure
10:00	Barry Ginat	Technion – Israel Institute of Technology	Resonant Dynamical Friction at The Galactic Center (VIRTUAL)
10:15	Sanaea Rose	University of California, Los Angeles	Stellar Collisions in the Galactic Center (VIRTUAL)
10:30	Francisco I. Aros	Indiana University	Effects of stellar and intermediate-mass black holes on the degree of energy equipartition in globular clusters.

### Coffee Break

10:45 – 11:00

## 201 - Special Session: Accessibility and Inclusivity in the Dynamics Community

Chair: Juliette Becker

Slack Chair: Steven Gough-Kelly

11:00 – 12:30

11:00	Allyson Bieryla	Center for Astrophysics   Harvard & Smithsonian	Using Sound to Make Solar Eclipses Accessible for the Blind and Low-vision Community (Invited)
11:45	Guided Discussion	In the second half of the workshop, we will discuss how various topics in accessibility play a role in the operations of the DDA, and will solicit suggestions for how accessibility can be improved in our community.	

### Lunch

12:30 – 2:00

## 202 - Asteroid Dynamics

Chair: Alex Meyer

Slack Chair: Sam Hadden

2:00 – 3:30

2:00	William Oldroyd	Northern Arizona University	Active Quasi-Hilda 2009 DQ118 and the Asteroid-Comet Boundary
2:15	Dahlia Baker	University of Colorado Boulder	Statistical Variation in YORP Evolution due to Random Boulder Populations and their Motion
2:30	Rogério Deienno	Southwest Research Institute	Accretion in the Main Asteroid belt
2:45	Stanley Dermott	University of Florida	Do HED meteorites originate from two large craters on asteroid Vesta?
3:00	Kevin Walsh	Southwest Research Institute	Formation of satellites around large asteroids
3:15	Julian Marohnic	University of Maryland	Simulating the effects of particle shape on the tidal disruption and reaccumulation of small Solar System objects.

### Poster Pops

Each poster presenter will be given 1 minute to advertise their poster.

Up to 20 posters may be presented (remainder on Thursday), first-come-first-served, submit your slide to reserve your slot.

3:30 – 3:50

### Poster Session

All posters featured. See poster titles below.

3:30 – 5:00

### 209 - Community Seminar & Mentoring Event

This event is intended to provide a space for junior members to receive mentoring and guidance from senior DDA members. We will start with a discussion on a recent Nature paper “Quantifying hierarchy and dynamics in US faculty hiring and retention”. This will be followed by a formal mentoring event where participants in the year-round mentoring program can meet with their group, and new participants will be paired with a mentor for a conversation about careers, research, and any other topics of interest.

Chairs: Juliette Becker, Santiago Torres, William Oldroyd

5:00 – 6:30

### End of Sessions for the Day

6:30

## Wednesday, May 10th

### Coffee and Gathering

8:20 – 8:55

### Introduction and Announcements

Matt Tiscareno, Seth Jacobson, Dan Tamayo

SOC, LOC and DDA Chairs

8:55 – 9:00

### 300 - Special Session: Uniform Sizes and Spacing in Planetary Systems 1

Chair: Songhu Wang

Slack Chair: Gabriel Nathan

9:00 – 10:15

9:00	Sarah Millholland	MIT	Peas-in-a-Pod: A Review on the Observed Patterns of Intra-System Uniformity (Invited)
	Lauren Weiss	University of Notre Dame	
9:25	Hilke Schlichting	UCLA	Giant Impacts: Sculpting Planet Uniformity or Diversity? (Invited) (VIRTUAL)
9:50	Fred Adams	University of Michigan, Ann Arbor	Dynamical Configurations of Planetary Systems Arising from Energy Optimization (Invited)

### Coffee Break

10:15 – 10:25

### 301 - Special Session: Uniform Sizes and Spacing in Planetary Systems 2

Chair: Lauren Weiss

Slack Chair: Janosz Dewberry

10:25 – 11:10

10:25	Armaan Goyal	Indiana University	The Interplay of Planetary Uniformity and Near-Resonant Dynamics
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10:40	David Shaw	University of Notre Dame	Updated Masses for Kepler-90's Gas Giants Via Transit-Timing Variation and Radial Velocity Observations (VIRTUAL)
10:55	Caleb Lammers	University of Toronto	Intra-system uniformity: a natural outcome of dynamical sculpting

**Brief Break**

11:10 – 11:15

**302 - Stellar Dynamics 1: Engulfments and Explosions**

Chairs: Christopher O'Connor, Joshua Shields

Slack Chair: Jessica Birky

11:15 – 12:15

11:15	Ricardo Yarza	University of California, Santa Cruz	The hydrodynamics of planetary engulfment
11:30	Thomas Donlon	Rensselaer Polytechnic Institute	RR Lyrae Stars as Accelerometers and their Post-Engulfment Companions
11:45	Joshua Shields	Michigan State University	Testing the Double Detonation SN Ia Progenitor Scenario: A High Precision Proper Motion Survey of the SN 1006 Remnant
12:00	Christopher O'Connor	Cornell University	Simulations of planetary engulfment in MESA: envelope hydrodynamics, light curves, and prospects for survival

**Lunch**

12:15 – 1:45

**303 - Rubin Prize Lecture**

Chair: Dan Tamayo

Slack Chair: Matt Tiscareno

1:45 – 2:45

1:45	Kathryn Volk	Planetary Science Institute	Using distant small body populations to reveal the solar system's dynamical history
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**Coffee Break**

2:45 – 3:00

**305 - Dynamical Theory and Tools**

Chair: Brett Gladman

Slack Chair: Darin Ragozzine

3:00 – 4:45

3:00	Daniel Tamayo	Harvey Mudd College	Insights from the Hill Problem for Understanding Mean Motion Resonances
3:15	David Hernandez	Yale University	Switching integrators reversibly in the astrophysical $N$ -body problem
3:30	Tiger Lu	Yale University	Self-Consistent Spin, Tidal, and Dynamical Equations of Motion in the REBOUND framework
3:45	Soley Hyman	University of Arizona/Steward Observatory	An analytic post-Newtonian method for detecting general relativistic effects in the S stars
4:00	Alessandra Celletti	University of Rome Tor Vergata	Space debris families: from perturbative methods to machine learning techniques (VIRTUAL)
4:15	Anargyros Dogkas	University of Rome (Tor Vergata)	Secular evolution of debris in highly eccentric and inclined orbits (VIRTUAL)
4:30	Janosz Dewberry	CITA	Dynamical tides in rotationally flattened planets and stars with stable stratification

**Brief Break**

4:45 – 4:50

**306 - Planetary Satellite Dynamics 1: Ocean Worlds**

Chair: Marina Brozovic

Slack Chair: Hanna Adamski

4:50 – 5:35

4:50	Brynna Downey	University of California, Santa	An observational constraint on
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		Cruz	Titan's tidal dissipation
5:05	Maryame El Moutamid	Cornell University	The Role of Three-Body Resonances on the Dynamical History of the Saturnian Satellite System
5:20	Alyssa Rhoden	Southwest Research Institute	Cascading Habitability: Exploring the Effects of Disruptive Collisions on Ocean Worlds

**End of Sessions for the Day****5:35****DDA Banquet**

Venue: Beggar's Banquet, 218 Abbot Road, East Lansing MI

7:00 – 9:00

**Thursday, May 11th****Coffee and Gathering**

8:20 – 8:55

**Introduction and Announcements**

Matt Tiscareno, Seth Jacobson, Dan Tamayo

SOC, LOC and DDA Chairs

8:55 – 9:00

**400 - Stellar Dynamics 2: Binaries**

Chair: Joshua Shields

Slack Chair: Thomas Donlon

9:00 – 10:15

9:00	Lawrence Molnar	Calvin University	Contact Binary Star Formation
9:15	Noah Vowell	Michigan State University	HIP 33609 b: a highly eccentric transiting brown dwarf orbiting a B-star
9:30	Jessica Birky	University of Washington	Prospects of Constraining Tidal Dissipation in Low-Mass Binary Stars
9:45	Mor Rozner	Technion	Binary formation through gas-assisted capture and the implications for stellar, planetary and compact-object evolution (VIRTUAL)
10:00	Denyz Melchor	University of California, Los Angeles	Tidal Disruption Events from the

Angeles

Combined Effects  
of Two-Body  
Relaxation and the  
Eccentric  
Kozai-Lidov  
Mechanism

### Coffee Break

10:15 – 10:30

### 401 - Exoplanet Dynamics 2: Stellar and Planetary Obliquities

Chair: John Zanazzi

Slack Chair: Rogerio Deienno

10:30 – 11:45

10:30	Konstantin Gerbig	Yale University	Precession-Driven Dissipation in Exoplanet-Hosting Binary Star Systems
10:45	Yubo Su	Princeton University	The Effect of Protoplanetary Disk Photoevaporation on Disk-Driven Resonantly Excited Stellar Obliquities
11:00	Michelle Vick	Northwestern University	Forming Perpendicular Hot Jupiter Systems via High-Eccentricity Migration
11:15	Xiumin Huang	Purple Mountain Observatory, Chinese Academy of Sciences	Evolution of the Planetary Obliquity under the Competition of Eccentric Kozai-Lidov Resonance and the Equilibrium Tide (VIRTUAL)
11:30	Sarah Millholland	Massachusetts Institute of Technology	Spin Dynamics of Planets in Resonant Chains: An Abundance of High Obliquities

### 402 - Planetary Ring Dynamics

Chair: Jackson Barnes

Slack Chair: Dahlia Baker

11:45 – 12:30

11:45	Philip Nicholson	Cornell University	Normal modes at the outer edge of Saturn's B ring.
12:00	Matthew Hedman	University of Idaho	Resonantly-genera ted brightness variations in the Uranian rings seen in Voyager 2 images

12:15	Mia Mace	SETI Institute	Investigating the effects of stochastic charging on the orbital dynamics and precipitation of nanodust in Saturn's rings
<b>Lunch</b>			
12:30 -2:00			
<b>403 - Planetary Origins Dynamics 2: Protoplanetary Disks</b>			
Chair: Malena Rice			
Slack Chair: Sergio Best			
2:00 - 3:30			
2:00	Jiaru Li	Cornell University	Resonant Excitation of Planetary Eccentricity due to a Dispersing Eccentric Protoplanetary Disk: a New Mechanism of Generating Large Planetary Eccentricities
2:15	Fernanda Correa Horta	The University of Chicago	Influence of Protoplanetary Disks and Orbital Resonances on the Formation of Super Earths via Giant Impacts
2:30	David Minton	Purdue University	Modeling collisional fragmentation with <i>Fraggle</i> , a high fidelity fragment generation model developed for the <i>Swiftest</i> n-body project.
2:45	Carlisle Wishard	Purdue University	Collisional Fragmentation During Terrestrial Planet Accretion from a Narrow Annulus
3:00	Thomas Steiman-Cameron	Indiana University	Transport in Gravitationally Unstable Protoplanetary Disks: Slings, Swings, and Rings
3:15	Cristobal Petrovich	Pontificia Universidad Catolica de Chile	A long resonant chain shaping the disk around HD

### Poster Pops

Each poster presenter will be given 1 minute to advertise their poster.

Any posters that were not presented in the Tuesday "pops" may be presented at this time.

3:30 – 3:50

### Poster Session

All posters featured. See poster titles below.

3:30 – 5:00

### 404 - DDA Business Meeting

All DDA Meeting attendees are welcome and encouraged to attend!

Only DDA members will be able to vote. DDA officers will give reports, and future meetings and activities of the AAS Division on Dynamical Astronomy (DDA) will be discussed.

5:00 – 6:30

### End of Sessions for the Day

**6:30**

## Friday, May 12th

### Coffee and Gathering

8:20 – 8:55

### Introduction and Announcements

Matt Tiscareno, Seth Jacobson, Dan Tamayo

SOC, LOC and DDA Chairs

8:55 – 9:00

### 500 - Special Session: Binary Asteroids after DART 1

Chair: Matija Cuk

Slack Chair: Tajudeen Oluwafemi Amuda

9:00 – 10:15

9:00	Alex Meyer	University of Colorado, Boulder	Leveraging Observations to Model the Dynamics of the Didymos System After the DART Impact (Invited)
9:25	Yun Zhang	Department of Aerospace Engineering, University of Maryland, College Park	Rubble-pile structural and dynamical evolution under YORP and the pathway to a binary system (Invited)
9:50	Harrison Agrusa	Université Côte d'Azur, Observatoire de la Côte d'Azur, CNRS, Laboratoire Lagrange	The post-impact rotation state of Dimorphos due to the DART Impact (Invited)

### Coffee Break

10:15 – 10:25

### 501 - Special Session: Binary Asteroids after DART 2

Chair: Harrison Agrusa

Slack Chair: Yun Zhang

10:25 – 11:10

10:25	Matija Cuk	SETI Institute	BYORP Effect on True Rubble Pile Secondaries
10:40	Daniel Scheeres	University of Colorado, Boulder	The Dynamical Evolution of Dimorphos's Ejecta from the DART Impact Revealed by the Hubble Space Telescope
10:55	Rachel Cueva	University of Colorado Boulder	Orbit-Attitude Coupled Tidal-BYORP Evolution of Didymos After DART

**Lunch**

11:10 – 12:40

**502 - Galaxy Dynamics 3: Milky Way and Friends**

Chair: Monica Valluri

Slack Chair: Sandeep Kataria

12:40 – 1:40

12:40	Ting Li	University of Toronto	Impact of LMC and Sagittarius dwarf on Milky Way's satellites and their tidal streams (VIRTUAL)
12:55	Arpit Arora	University of Pennsylvania	Subhalos-stream interaction in the presence of massive satellites
1:10	Hayden Foote	University of Arizona	The Large Magellanic Cloud's Dynamical Friction Wake in Cold vs. Fuzzy Dark Matter
1:25	Eric Bell	University of Michigan	Uncertainties associated with the backward integration of dwarf satellites using simple parametric potentials

**Coffee Break**

1:40 – 2:00

**503 - Planetary Satellite Dynamics 2**

Chair: Maryame El Moutamid

Slack Chair: Emily Elizondo

2:00 – 2:45

2:00	Jose Castro	University of	The Dynamical
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### Arizona

Fate of Lunar  
Ejecta and the  
Possible Origin of  
Earth's  
Quasi-satellite  
Kamo'oalewa  
(VIRTUAL)  
Revisiting orbit fits  
for the  
Eris-Dysnomia  
system  
Unraveling the  
complex dynamics  
of Haumea's  
satellites

2:15	Marina Brozovic	Jet Propulsion Laboratory/California Institute of Technology
2:30	Benjamin Proudfoot	Brigham Young University

### Concluding Remarks

Chair: Dan Tamayo

2:45 – 2:50

### Ice Cream Social

2:50

### End of Meeting

2:50

## Poster Presentations

### Available all week

#### 203 - Asteroid and Comet Dynamics Posters

Poster Pops on Thursday 5/11 at 3:30

Slack Chair: Aswin Sekhar

Severance Graham	University of Arizona	The destabilization of Neptune's distant mean motion resonances by Uranus (VIRTUAL)
Dallin Spencer	Brigham Young University	SBDynT: Characterizing the Solar System Small Bodies by Proper Elements and Chaos (VIRTUAL)
Rosemary Dorsey	University of Canterbury (New Zealand)	OSSOS: XXVI. Population Estimates for Theoretically Stable Centaurs Between Uranus and Neptune (VIRTUAL)

#### 204 - Dynamical Theory and Tools Posters

Poster Pops on Thursday 5/11 at 3:30

Slack Chair: Darin Ragozzine

Tajudeen  
Oluwafemi Amuda      Air Force Institute  
of Technology

Investigating  
Motion around  
equilibrium points  
in the restricted  
three-body  
problem under  
effects of radiation  
forces and  
circumbinary disc  
Data Science in  
Dynamical  
Astronomy  
Education  
(WITHDRAWN)  
Fifty Years of Halo  
Orbits (VIRTUAL)

Thomas Y. Chen      Columbia  
University

David Dunham      KinetX Aerospace,  
Inc.

## 205 - Exoplanet Dynamics Posters

Poster Pops on Tuesday 5/9 at 3:30

Slack Chair: Rogerio Deienno

Kyriaki I.  
Antoniadou      Aristotle University  
of Thessaloniki

Dynamical  
constraints on the  
three-planet  
system Kepler-51  
(VIRTUAL)  
Test Particle  
Stability and the  
Eccentricity of  
Multiplanet  
Systems  
Spin Dynamics in  
Compact  
Multiplanetary  
Systems: Towards  
Understanding  
Resonance  
Overlap and Chaos  
Title: The K2 &  
TESS Synergy:  
Combining NASA's  
Planet Hunters  
(WITHDRAWN)  
Investigating the  
properties  
planetesimal  
systems with  
multiple members  
formed from  
gravitational  
collapse  
3D configuration  
of a compact  
multi-giant system  
lying at the  
stability boundary  
Kepler-80  
Revisited:  
Assessing the  
Participation of a

Miguel Angel  
Martinez      Northwestern  
University

Yubo Su      Princeton  
University

Erica Thygesen      Michigan State  
University

Sanskriti Verma      Michigan State  
University

Xianyu Wang      Indiana University

Drew Weisserman      University of  
Michigan

Kyle Hixenbaugh      Indiana University

Newly Discovered Planet in the Resonant Chain Unraveling the Origins of Spin-Orbit Misalignments: Evidence for Planet-Planet Dynamical Interactions (WITHDRAWN)  
The Migration and Evolution of Eccentric Planets (MEEP) Survey

Jack Schulte      Michigan State University

## 206 - Galaxy Dynamics Posters

Poster Pops on Tuesday 5/9 at 3:30

Slack Chair: Sandeep Kataria

Eric Bell      University of Michigan

The infall of dwarf satellite galaxies are influenced by their host's massive accretions

Scott Lucchini      University of Wisconsin - Madison

Moving groups across the Galactic disk with Gaia DR3 (WITHDRAWN)

Zhijie (Jay) Xu      Pacific Northwest National Laboratory

Universal scaling laws and density slopes for dark matter halos

Zhijie (Jay) Xu      Pacific Northwest National Laboratory

Energy cascade for distribution and evolution of supermassive black holes and host galaxies

Rachel Lee McClure      University of Wisconsin -- Madison

Galactic Bar Resonances and the Vertical BPX Stellar Orbits in an N-Body Simulation (WITHDRAWN)

Peter Craig      Rochester Institute of Technology

Building HI Maps Without Using Kinematic Distances (WITHDRAWN)

## 207 - Planetary Origins Dynamics Posters

Poster Pops on Thursday 5/11 at 3:30

Slack Chair: Sergio Best

Hanna Adamski      Yale University

The Signature of Planet Nine in Earth's Orbital Elements

Sanskruiti Admane      Ohio State

Quantifying Debris



	University	Production in Imperfect Merger Planetary Formation Models Planetesimal Formation by Gravitational Collapse with the Perfect-SSDEM Hybrid Collisional Method Exploring Orbital Properties Through Assumptions of Pebble Accretion Isolation Masses Imperfect Accretion in a GPU-enhanced N-Body Simulator Debris of Giant Impacts Empirically establishing relationships between properties of gravitationally collapsing pebble clouds and formed planetesimal systems Understanding the formation of terrestrial planets (VIRTUAL) Preliminary constraints on Solar System formation scenarios via models of isotopic fractionation during terrestrial core formation Can a planet lose a moon? (VIRTUAL) Coupling SPH Giant Impact Models with a Modified SyMBA code to simulate Lunar Formation Simulating the Effects of Outer Giant Planets on Inner Super-Earths with In Situ Formation Models
Jackson Barnes	Michigan State University	
Lucas Brefka	Pennsylvania State University	
Ryan Copeland	Michigan State University	
Emily Elizondo	Michigan State University	
Luka Ludden	University of Minnesota	
Bernard Monteiro de Barros Leal	Michigan State University	
Gabriel Nathan	Michigan State University	
Collin Dobson	Michigan State University	
Brenna Chetan	Michigan State University	
Phoebe Sandhaus	Pennsylvania State University	



**208 - Stellar Dynamics Posters**

Poster Pops on Tuesday 5/9 at 3:30

Tomás Cabrera

Carnegie Mellon  
University

Runaway and  
Hypervelocity  
Stars from Strong  
Encounters with  
Compact Objects  
in Globular  
Clusters  
(WITHDRAWN)

**Source URL:** <https://dda.aas.org/meetings/2023/program>

**Links**

[1] <https://submissions.mirasmart.com/DDA54/Itinerary/EventsAAG.aspx>

[2] [https://aas.org/sites/default/files/2023-04/Astronomy\\_on\\_tap\\_050823.jpg](https://aas.org/sites/default/files/2023-04/Astronomy_on_tap_050823.jpg)