

**American Astronomical Society – Division on Dynamical Astronomy**  
**Talk Schedule**

\*\*Draft 04-21-08\*\*

**MONDAY, April 28, 2008**

---

**Session 01**                      *Stars and Galaxies*  
**8:20 AM – 10:25 AM**        **Luke Dones, Chair**

---

8:20 AM – 9:05 AM            *Telling Tales with Tidal Tails*  
– Kathryn V. Johnston, Invited

9:05 AM – 9:25 AM            *Stellar Dynamical Evidence against a Cold Disk Origin for Stars in the Galactic Center*  
– Jorge Cuadra

9:25 AM – 9:45 AM            *Redshift Asymmetry as an Indication of Dark Energy around Groups of Galaxies*  
– Mauri J. Valtonen

9:45 AM – 10:05 AM         *Reconstructing the Mass Profile of the Milky Way*  
– Stacy S. McGaugh

10:05 AM – 10:25 AM        *Does M42 Presage the Dual Proposal?*  
– David F. Bartlett

**10:25 AM – 10:45 AM**        **Morning Break**

---

**Session 02**                      *The Yarkovsky and YORP Effects*  
**10:45 AM – 12:30 PM**       **William I. Newman, Chair**

---

10:45 AM – 11:30 AM        *Analytic Theory of the YORP Effect for Near-Spherical Objects*  
– David Nesvorny, Invited

11:30 AM – 11:50 AM        *YORP-Driven Expansion of Binary Asteroid Systems*  
– Eugene G. Fahnestock

11:50 AM – 12:10 PM        *The Yarkovsky Effect in the Flora and Baptistina Asteroid Families*  
– Lawrence A. Molnar

12:10 PM – 12:30 PM        *Searching for Yarkovsky Among the Near-Earth Asteroids*  
– Steven R. Chesley

**12:30 PM – 1:45 PM**        **Lunch**

---

**Session 03**                      *Planet-Disc Dynamics*  
**1:45 PM – 3:30 PM**        **John E. Chambers, Chair**

---

1:45 PM – 2:30 PM            *The Co-orbital Corotation Torque and Its Effect on Planet Migration*  
– Frederic Masset, Invited

**American Astronomical Society – Division on Dynamical Astronomy**  
**Talk Schedule**

\*\*Draft 04-21-08\*\*

2:30 PM – 2:50 PM      *Evolution of Giant Planet Orbits in a Turbulent Circumstellar Disk*  
– Althea Moorhead

2:50 PM – 3:10 PM      *Planetary Migration in a Self-Gravitating Gaseous Disk*  
– Clement Baruteau

3:10 PM – 3:30 PM      *Planet Migration in Planetesimal Disks: Effects of a Gas Disk*  
– Chris C. Capobianco

**3:30 PM – 3:50 PM      Afternoon Break**

---

**Session 04                      *Kuiper and Oort***  
**3:50 PM – 5:15 PM          Alan W. Harris, Chair**

---

3:50 PM – 4:35 PM      *Resonant Dynamics of Kuiper Belt Objects and Induced Biases in Surveys*  
– Brett Gladman, Invited

4:35 PM – 4:55 PM      *Assessing the Threat of Oort Cloud Comet Showers*  
– Nathan A. Kaib

4:55 PM – 5:15 PM      *Evolution of the Inner Oort Cloud in the Current Galactic Environment*  
– Ramon Brasser

**5:15 PM-6:45 PM          Business Meeting**

---

**Session 05                      *Public Lecture. At Saturn: Tripping the Flight Fantastic***  
**7:30 PM – 8:30 PM          Carolyn C. Porco, Invited**  
**Glenn Miller Ballroom, University of Colorado**

---

**American Astronomical Society – Division on Dynamical Astronomy**  
**Talk Schedule**

\*\*Draft 04-21-08\*\*

**TUESDAY, April 29, 2008**

---

<b>Session 06</b>	<b><i>Extrasolar Planets</i></b>
<b>8:20 AM – 10:40 AM</b>	<b>Harold F. Levison, Chair</b>

---

8:20 AM – 8:40 AM	<i>Measuring Interior Properties of Very Hot Jupiters Through Transit Timing</i> – Darin Ragozzine
8:40 AM – 9:00 AM	<i>Searching for Planets using Particle Swarm Optimization</i> – John E. Chambers
9:00 AM – 9:20 AM	<i>Survival and Detectability of Exoplanets Beyond 100 AU</i> – Dimitri Veras
9:20 AM – 9:40 AM	<i>Turbulence in Extrasolar Planetary Systems Implies that Mean Motion Resonances are Rare</i> – Fred C. Adams
9:40 AM – 10:00 AM	<i>The OGLE-2006-BLG-109L Planetary System: Prospects for a Habitable Planet</i> – Renu Malhotra
10:00 AM – 10:20 AM	<i>On the Origins of Eccentric Close-in Planets</i> – Soko Matsumura
10:20 AM – 10:40 AM	<i>Tidal Dynamics of Transiting Extrasolar Planetary Systems</i> – Daniel C. Fabrycky
<b>10:40 AM – 11:00 AM</b>	<b>Morning Break</b>

---

<b>Session 07</b>	<b><i>Black Holes</i></b>
<b>11:00 AM – 12:25 PM</b>	<b>Stephen C. Unwin, Chair</b>

---

11:00 AM – 11:45 AM	<i>Black Holes and the Evolution of Galaxies</i> – Douglas O. Richstone, Invited
11:45 AM – 12:05 PM	<i>Dynamical Friction of Black Hole Pairs at Gas-Rich Galactic Nuclei</i> – Hyosun Kim
12:05 PM – 12:25 PM	<i>Fingerprints of Intermediate Mass Black Holes in Globular Clusters: Quenching of Mass Segregation</i> – Michele Trenti
<b>12:25 PM – 1:40 PM</b>	<b>Lunch</b>

**American Astronomical Society – Division on Dynamical Astronomy**  
**Talk Schedule**

\*\*Draft 04-21-08\*\*

---

<b>Session 08</b> <b>1:40 PM – 3:00 PM</b>	<b><i>The Solar System: Stable or unstable? Chaotic or non-chaotic?</i></b> <b>Joseph M. Hahn, Chair</b>
1:40 PM – 2:00 PM	<i>An Investigation of the Stability of Systems of Earth-Mass Bodies Orbiting a Sun-Like Star</i> – Andrew W. Smith
2:00 PM – 2:20 PM	<i>On the Dynamical Stability of the Solar System</i> – Konstantin Y. Batygin
2:20 PM – 2:40 PM	<i>High Degree of Freedom Dynamics, Weak Chaos, and the Outer Solar System</i> – William I. Newman
2:40 PM – 3:00 PM	<i>Solar System: Surfing the Edge of Chaos Part II</i> – Wayne B. Hayes
<b>3:00 PM – 3:20 PM</b>	<b>Afternoon Break</b>
<b>Session 09</b> <b>3:20 PM – 5:20 PM</b>	<b><i>Celestial Mechanics</i></b> <b>Matija Cuk, Chair</b>
3:20 PM – 3:40 PM	<i>Relative Equilibria in the Sphere-Restricted Full 2-Body Problem</i> – Daniel J. Scheeres
3:40 PM – 4:00 PM	<i>Tidal Torques. Critical Review of Some Techniques</i> – Michael Efroimsky
4:00 PM – 4:20 PM	<i>Relativistic Contribution to Eccentricity Bias</i> – Antonio R. Mondragon
4:20 PM – 4:40 PM	<i>Second-order Corrections to Time Delay and Deflection of Light Passing near a Massive Object</i> – Neil Ashby
4:40 PM – 5:00 PM	<i>Dynamics of Planetary Systems in Counter-revolving Configurations</i> – Julie Gayon
5:00 PM – 5:20 PM	<i>An Asteroid Breakup 160 My Ago as the Probable Source of the K-T Impactor</i> – William Bottke
<b>6:45 PM – 9:45 PM</b>	<b>Banquet</b>

**American Astronomical Society – Division on Dynamical Astronomy**  
**Talk Schedule**

\*\*Draft 04-21-08\*\*

**WEDNESDAY, April 30, 2008**

---

<b>Session 10</b> <b>8:20 AM – 9:15 AM</b>	<b><i>Brouwer Award Presentation and Lecture</i></b> <b>William R. Ward, Chair</b>
8:25 AM – 9:15 AM	<i>Brouwer Lecture: Very Small-Scale Structure in the Cold Dark Matter Distribution</i> – Simon White, Invited
<b>Session 11</b> <b>9:15 AM – 10:20 AM</b>	<b><i>Astrometry</i></b> <b>Alice Monet, Chair</b>
9:15 AM – 10:00AM	<i>Astrometry with the Hubble Space Telescope</i> – G. Fritz Benedict, Invited
10:00 AM – 10:20 AM	<i>Dynamical Astronomy with SIM</i> – Stephen C. Unwin
<b>10:20 AM – 10:40 AM</b>	<b>Morning Break</b>
<b>Session 12</b> <b>10:40 AM – 12:20 PM</b>	<b><i>Capture and Impact</i></b> <b>Wayne B. Hayes, Chair</b>
10:40 AM – 11:00 AM	<i>Formation of The Earth Impactor and Moon</i> – Edward Belbruno
11:00 AM – 11:20 AM	<i>On Non-Symmetric Satellite Capture in the 3D Elliptic Restricted Three-Body Problem</i> – Marc A. Murison
11:20 AM – 11:40 AM	<i>The Stability and Dynamics of Planets in Tight Binary Systems</i> – Lamy A. Saleh
11:40 AM – 12:00 PM	<i>Chaotic Capture of Planetesimals into Regular Regions of the Solar System. I: The Kuiper Belt</i> – Alessandro Morbidelli
12:00 PM – 12:20 PM	<i>Chaotic Capture of Planetesimals into Regular Regions of the Solar System. II: Embedding Comets in the Asteroid Belt</i> – Harold F. Levison
<b>12:20 PM – 1:35 PM</b>	<b>Lunch</b>
<b>Session 13</b> <b>1:35 PM – 2:35 PM</b>	<b><i>Satellites</i></b> <b>Nader Haghighipour, Chair</b>
1:35 PM – 1:55 PM	<i>The 3-dimensional Rotation of Titan, and the Possibility of a Resonant Wobble</i> – Benoit Noyelles

**American Astronomical Society – Division on Dynamical Astronomy**  
**Talk Schedule** \*\*Draft 04-21-08\*\*

1:55 PM – 2:15 PM      *Orbital Resonances during Tidal Heating of Icy Satellites*  
– Ke Zhang

2:15 PM – 2:35 PM      *The Rotation of Janus and Epimetheus*  
– Matthew S. Tiscareno

**2:35 PM – 2:55 PM      Afternoon Break**

---

**Session 14      *Asteroids and Main-Belt Comets***  
**2:55 PM – 4:35 PM      Joseph N. Spitale, Chair**

---

2:55 PM – 3:15 PM      *Regulation of Primary Spin Rate of Asynchronous Binary Asteroids by “Tidal Saltation”*  
– Alan W. Harris

3:15 PM – 3:35 PM      *Long-Lived Dynamical Niches in the Inner Solar System*  
– Matija Cuk

3:35 PM – 3:55 PM      *Sweeping Resonances in the Main Asteroid Belt and the Late Heavy Bombardment*  
– David A. Minton

3:55 PM – 4:15 PM      *Asteroid Clusters in Major Mean Motion Resonances with Jupiter*  
– Miroslav Broz

4:15 PM – 4:35 PM      *Dynamics of Main Belt Comets and its Implications to Their Origins, Activation, and Possible Contribution to Earth’s Water*  
– Nader Haghighipour

---

**Session 15      Poster Session**  
**4:45 PM – 6:45 PM      *Please refer to abstracts for the list of poster presentations***  
**SwRI, 1050 Walnut St., 4th-floor conference room**

---

**American Astronomical Society – Division on Dynamical Astronomy**  
**Talk Schedule**

\*\*Draft 04-21-08\*\*

**THURSDAY, May 1, 2008**

---

**Session 16**

***Rings – I***

**8:20 AM – 10:20 AM**

**Marc A. Murison, Chair**

---

8:20 AM – 8:40 AM

*Physics of Jupiter's Gossamer Rings*  
– Douglas P. Hamilton

8:40 AM – 9:00 AM

*The Outer Dust Rings of Uranus in the Hubble Space Telescope*  
– Mark R. Showalter

9:00 AM – 9:20 AM

*Dynamics of Particles in E Rings of Saturn Near Enceladus' Orbit*  
– Manish Agarwal

9:20 AM – 9:40 AM

*What is New in Saturn's F Ring Azimuthal Channels?*  
– Carlos E. Chavez

9:40 AM – 10:00 AM

*Searching for Sub-Centimeter Particles in Saturn's Main Rings*  
– Rebecca A. Harbison

10:00 AM – 10:20 AM

*Cassini Observations of Lindblad Resonances in Low Optical Depth Rings*  
– Matthew M. Hedman

**10:20 AM – 10:40 AM**

**Morning Break**

---

**Session 17**

***Planet Formation***

**10:40 AM – 12:00 PM**

**Philip D. Nicholson, Chair**

---

10:40 AM – 11:00 AM

*Accretion of Gas onto Circumstellar Disks During Planet Formation*  
– Henry B. Throop

11:00 AM – 11:20 AM

*Planetesimals to Protoplanets: Effect of Dust on Terrestrial Planet Formation*  
– Zoe Leinhardt

11:20 AM – 11:40 AM

*Building the Terrestrial Planets: Constraining Planetary Accretion in the inner Solar System*  
– Sean N. Raymond

11:40 AM – 12:00 PM

*The Varieties of Planetary Experience*  
– Edward Thommes

---

**Session 18**

***Rings – II***

**12:00 PM – 2:35 PM**

**Carolyn C. Porco, Chair**

---

12:00 PM – 12:20 PM

*Cassini-VIMS Observations of Self-gravity Wakes in Saturn's Rings – II*  
– Philip D. Nicholson

**American Astronomical Society – Division on Dynamical Astronomy**  
**Talk Schedule**

**\*\*Draft 04-21-08\*\***

- 12:20 PM – 12:40 PM      *Edge-Waves in Ring Gaps and the Determination of Masses of Embedded Satellites*  
– John W. Weiss
- 12:40 PM – 1:00 PM      *Kinematics of the Outer Edges of Saturn’s A and B Rings*  
– Joseph N. Spitale
- 1:00 PM – 1:15 PM      Afternoon Break**
- 1:15 PM – 1:35 PM      *The Physics of the Sharp Edges of Broad Planetary Rings*  
– Joseph M. Hahn
- 1:35 PM – 1:55 PM      *Density Waves in Saturn’s Rings: Non-linear Dispersion and Moon Libration Effects*  
– Miodrag Sremcevic
- 1:55 PM – 2:15 PM      *Temporally Modulated Density Waves in Saturn’s Rings*  
– Glen R. Stewart
- 2:15 PM – 2:35 PM      *Formation of Saturn’s Rings by Tidal Disruption of a Centaur*  
– Luke Dones