

**KIAM Astrodynamics Day, June 28, 2019  
Room 4 (formerly Room 26), Main Building**



**Dr. Kathleen C. Howell**

Hsu Lo Distinguished Professor  
of Aeronautics and Astronautics  
Purdue University (United States)



**Dr. Daniel J. Scheeres**

University of Colorado Distinguished Professor  
A. Richard Seebass Endowed Chair  
University of Colorado at Boulder (United States)

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**10:00** Opening speech

*Prof. Mikhail Ovchinnikov, Head of KIAM Space Systems Dynamics Department*

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**Strongly Perturbed Orbital Dynamics**

**10:10** Orbital Dynamics Around Rubble-Pile Binary and Contact Binary Asteroids

*Prof. Daniel Scheeres, University of Colorado Boulder*

**10:50** Quasi-Satellite Orbit as a Resonant Phenomenon

*Prof. Vladislav Sidorenko, KIAM/Moscow Institute of Physics and Technology*

**11:05** Station-Keeping in an Unstable High Near-Circular Lunar Orbit

*Ms. Anastasia Tselousova, KIAM/Moscow Institute of Physics and Technology*

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**Coffee break**

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**Multi-Body and Coupled Dynamics**

**11:35** Safe Undocking and Departure from a Lunar Station in a Near Rectilinear Halo Orbit

*Prof. Kathleen Howell, Purdue University*

**12:15** Coupled Dynamics in a Formation of Satellites with Variable-Reflectivity Solar Sails

*Dr. Stepan Tkachev, KIAM*

**12:30** Optimal Design of Multi-Spacecraft Formations in Lissajous Orbits

*Dr. Sergey Trofimov, KIAM*

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**12:45** Closing remarks

*Prof. Mikhail Ovchinnikov, Head of KIAM Space Systems Dynamics Department*

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**12:55** Visiting Keldysh Memorial Cabinet & Museum