

Geological and Planetary Sciences

Session **N**

Room: 128 Baxter

10:50 - 11:10 AM	Madison Elle C. Tongco <i>Caltech-University of Iceland Exchange</i>	Genetic analysis of complete Arctic charr mitogenomes reveals colonization and differentiation patterns in four Arctic lakes	Arnar Pálsson <i>Professor of Bioinformatics, University of Iceland</i> Jonathan Kirshner <i>Graduate Student in Life and Environmental Sciences, University of Iceland</i>
11:10 - 11:30 AM	Kirby Fung <i>James J. Morgan SURF Fellow</i>	Investigating thresholds of boulder mobilization in post-wildfire debris flows	Michael P. Lamb <i>Professor of Geology</i> Emily Geyman <i>Graduate Student in Geology</i>
11:30 - 11:50 AM	Amber G. Liu <i>Mary Vodopia SURF Fellow</i>	Recovering settling velocity distributions of mud and flocs from light sensor data	Michael P. Lamb <i>Professor of Geology</i> Kimberly L. Miller <i>Laboratory Manager in Geology and Geochemistry</i>
11:50 AM - 1:00 PM	LUNCH		
1:00 - 1:20 PM	Wendy Wang <i>Dr. George R. Rossman SURF Fellow</i>	Investigating the growth characteristics and extracellular polymeric substances (EPS) of methylotrophic methanogens in AOM consortia	Victoria J. Orphan <i>James Irvine Professor of Environmental Science and Geobiology</i> Yurina Takahagi <i>Graduate Student in Geobiology</i>
1:20 - 1:40 PM	Carolina Ayala-Garnica <i>Ron Sven Rat and Bfield SURF Fellow</i>	Enantioselective crystallization of an RNA precursor and the origin of homochirality	S. Furkan Ozturk <i>Assistant Professor of Geobiology and Geochemistry; William H. Hurt Scholar</i> Kyogo Nagashima <i>Graduate Student in Chemistry</i>
1:40 - 2:00 PM	Alan Song <i>Jack and Edith Roberts SURF Fellow</i>	Automated dark-field birefringence microscope for investigation of crystallization kinetics of chiral species on magnetized substrates	S. Furkan Ozturk <i>Assistant Professor of Geobiology and Geochemistry; William H. Hurt Scholar</i> Sean J. Chen <i>Graduate Student in Chemical Engineering</i>
2:00 - 2:20 PM	Vedant Ganesh <i>Hannah Bradley SURF Fellow</i>	Binodal: Towards an n-ary phase diagram generator for geochemical and geological applications	Paul D. Asimow <i>Eleanor and John R. McMillan Professor of Geology and Geochemistry</i>

2:20 - 2:30 PM	BREAK		
2:30 - 2:50 PM	Abubakr S. Nazriev	GPU-accelerated radiative transfer forward model for aerosol-aware greenhouse gas retrievals	Christian Frankenberg <i>Chandler Family Professor of Environmental Science and Engineering; Senior Research Scientist, JPL</i>
2:50 - 3:10 PM	Ellin J. Qiao <i>Carl F. Braun SURF Fellow</i>	Aerosol corrected methane retrievals from slant viewing geometries	Christian Frankenberg <i>Chandler Family Professor of Environmental Science and Engineering; Senior Research Scientist, JPL</i> Jiani Yang <i>Graduate Student in Environmental Science and Engineering</i>
3:10 - 3:30 PM	Natalia M. Hernandez <i>Karen and James Cutts SURF Fellow</i>	Investigating groundwater-driven land deformation in the San Gabriel Valley using InSAR time series analysis	Mark Simons <i>John W. and Herberta M. Miles Professor of Geophysics</i>
3:30 - 3:50 PM	Isabella H. Mueller <i>Dr. Yuk L. Yung Memorial SURF Fellow</i>	Independent orbit determination for Jupiter Trojans from Gaia astrometry as a foundation for a distant-perturber search	Michael E. Brown <i>Richard and Barbara Rosenberg Professor of Planetary Astronomy</i>