

Ice, oceans and atmospheres on Earth and elsewhere

May 9-10, 2018

Wednesday, May 9, 2018:

9:30—10:00 Gathering and short opening words by the organizers

Session 1: The solar system

10:00—10:25 Alberto Adriani, INAF (Polygonal Cyclonic Structures over the Jupiter's Poles)

10:25—10:50 Antonello Provenzale, (Convection with tilted rotation: a metaphor for convective planetary atmospheres)

10:50—11:15 Bianca Maria Dinelli, CNR ISAC (Climatology of CH₄, HCN and C₂H₂ in Titan upper atmosphere from VIMS observations)

11:15—11:45 Coffee break

Session 2: Ice 1

11:45—12:10 Yonggang Liu or Zhouqiao Zhao (Sea-ice Melting Rates During the Snowball Earth Deglaciation)

12:10—12:35 Roiy Sayag (Stability of spherical shells of ice and the formation of rifts)

12:35—13:00 Predrag Popovic (Simple rules govern the patterns of Arctic sea ice melt ponds)

13:00—14:30 Lunch break

Session 3: Ice 2

14:30—14:55 Andrea Scagliarini (Effect of melt ponds distribution and dynamics on sea ice evolution: lessons from a continuum model)

14:55—15:20 Yongyun Hu (Abrupt climate transition of icy worlds from snowball to moist or runaway greenhouse)

15:20—15:45 Yosef Ashkenazy (Dynamics of the global meridional ice flow of Europa's icy shell)

15:45—16:15 Coffee break

Session 4: exoplanets 1

- 16:15—16:40 Dorian Abbot (Decrease in hysteresis of planetary climate for planets with long solar days)
- 16:40—17:05 Jun Yang (Effects of ocean dynamics on the habitable zone and observable phase curves for synchronously rotating exoplanets)
- 17:05—17:30 Francisco Spaulding (Investigating Equatorial Gaps in Snowball Earth Sea Glaciers on Tidally-Locked Exoplanets around M-stars)
- 19:00—21:00 Dinner

Thursday, May 10, 2018:

Session 5: exoplanets 2

- 9:15—9:40 Daniel Koll (Stirring up a storm: convective climate variability on tidally locked exoplanets)
- 9:40—10:05 Jade Checlair (A test for functioning silicate-weathering feedback on exoplanets)
- 10:05—10:30 Giuseppe Mitri (Interior structure of ocean worlds from the dwarf planet Ceres to Titan)
- 10:30—10:55 J. von Hardenberg (The Planet Simulator: Tuning a toy planet and preparing it for exoplanetary studies)
- 10:55—11:20 Coffee break

Session 6: Earth

- 11:20—11:45 RJ Graham (Modeled Cross-Tropopause Mass Exchange Comparable in Modern and Snowball Earth)
- 11:45—12:10 Hezi Gildor (Does light spectrum pose an upper bound on SST?)
- 12:10—12:35 Eli Tziperman (More frequent sudden stratospheric warming events due to enhanced MJO forcing expected in a warmer climate)
- 12:35—13:00 Summary and discussion