



Professor Velicogna's research group focuses on studying the cryospheric components of the water cycle and their response to climate forcing. In particular, the group studies Greenland and Antarctic ice sheets, their contribution to sea level rise, and the evolution of the Arctic water cycle in response to climate change.

**BREAKFAST LECTURE  
SERIES**

**Weighting Changes in  
Water and Ice from Space**

As a result of climate change, we are experiencing massive changes in the water and ice cycles around the planet. These changes are observed with unprecedented precision using measurements of time-variable gravity from space to provide invaluable information about our changing planet, including how fast ice sheets are melting and contributing to sea level rise, how much humans pump from aquifers, and how terrestrial water storage changes in response to drought.

# ISABELLA VELICOGNA

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**Ph.D., University of  
Trieste, Italy, 1999,  
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Geophysics**

**B.S., University of  
Trieste, Italy, 1995**

In the lab, she uses multi-sensor geophysical techniques, especially satellite time-variable gravity (GRACE) and altimetry (ICESAT, ERS, Envisat), as well as passive microwave and GPS, in combination with in-situ data, global climate model outputs and re-analysis data.

Her work has implications for future sea level rise, Earth system modeling

and global land water cycle. The impacts are not only scientific but also societal. The team is studying the changes in land ecosystems associated with changes in land hydrology, and they developing tools to better predict the regional patterns of sea level rise.

May 7, 2019 | UCI Student Center  
Breakfast: 7:30am | Lecture: 8:00 - 9:00am  
RSVP at [ps.uci.edu/BLS](https://ps.uci.edu/BLS)

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