





Seminar: Dr. Arnoldo Valle-Levinson

Friday October 1st, 2021 at 1pm

Hill Auditorium in Barrows Hall

## Astronomic influences on interdecadal sea-level variations and on El Niño-Southern Oscillation

This talk illustrates the possible connection between astronomic forcing and interdecadal sea-level variations in the eastern United States and in the Adriatic Sea. It also shows the potential linkage between the same astronomic forcing and El-Niño Southern Oscillation. The astronomic forcing that is considered relates to lunar precessions, solar activity and their interactions. These astronomic connections have been explored through inspiration drawn from other studies that scrutinize climate indices through dendrochronological records.



Arnoldo Valle-Levinson is a Professor at the Civil and Coastal Engineering Department at the University of Florida and is currently a Program Director in Physical Oceanography at the National Science Foundation. His work deals mainly with the study of estuarine and coastal hydrodynamics. Arnoldo has carried out research that combines observational, numerical and theoretical approaches to elucidate the effects of bathymetry on exchange hydrodynamics at the mouth of estuaries, fjords and coastal lagoons. His studies also consider the potential impact of hydrodynamics on nutrient fluxes, harmful algae and ichthyoplankton transport. Recent investigations concentrate on saltwater intrusion into estuaries and aquifers, compound flooding in coastal systems and sea-level rise variations. Arnoldo is a recipient of a CAREER award from the US National Science Foundation and of diverse Fellowships that have facilitated research activities in numerous countries. He is a Corresponding Member of the Mexican Academy of Sciences and a Chilean estuary 'Estero Arnoldo' is named in his honor.