



UNIVERSITÀ
DEGLI STUDI
DI PADOVA



**CRITICAL – Centro Studi sugli
Impatti dei Cambiamenti Climatici**

Early warning for sunny-day flooding in the East Coast of the United States: global implications

Wednesday, May 21st – 9:30 am

<https://unipd.zoom.us/j/85284377768?pwd=ylAbuO1CjbXvFIT0UJk2KvRhNMwh6r.1>

ID riunione: 852 8437 7768

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Speaker: Prof. Arnaldo Valle Levinson

University of Florida (US), Civil and Coastal Engineering Department

Dr. Valle-Levinson studies the effects of bathymetry on volume exchange at the mouth of semienclosed basins, with emphasis on estuaries, fjords, coastal lagoons and bays. As part of these studies, he investigates the effects of the forcing from wind stress, density gradients and tidal stresses. He has proposed a classification of semienclosed basins that considers these forcings plus the depth and width of the basin.

Moreover, he seeks to understand processes that favor ocean water intrusion into freshwater aquifers and estuaries. He is investigating secular variations of last-century sea level and their effects on saltwater intrusion.

Dr. Valle-Levinson has also investigated the potential impact of exchange processes on nutrient fluxes, harmful algae and ichthyoplankton transport. He has carried out research on the role of transverse circulation and vertical mixing in estuarine transport processes.

