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The Rivers and Seas of Titan

Tuesday, 29 October 2019 • 3:30 pm
MSI Conference Room • 3550 University

Saturn’s moon Titan is the second known Solar system world with active rivers and seas. Titan’s deceptively Earth-like landscape, the product of a methane cycle akin to Earth’s water cycle, has forced us to think differently about the processes that shape planetary surfaces. I will illustrate this with examples from Titan’s landscape, including the dynamics of methane rivers eroding mountains of ice, the search for waves on Titan’s seas, and the formation (or not) of river deltas. Drawing on data from the Cassini-Huygens mission, I will show how comparisons with Earth’s landscapes can teach us about Titan’s topography, weather, and climate.