Woods Hole Oceanographic Institution

Biology Department Seminar

Thursday, September 12, 2024 – 12:00 Noon

Living on the Edge: Ecological Dynamics at Abrupt Bathymetry

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Steep seafloor features are often biological hotspots that host rich and abundant marine life. The ecological, biological, and physical mechanisms responsible are still an on-going topic of research. I present data from several years of work as well as new results from ongoing data showing that from abyssal hills to seamounts to pinnacles to submarine canyons, abrupt bathymetry are ubiquitous in our oceans and have profound impacts on the local and the global scale. Using a variety of video and marine imaging data with active acoustics measurements in combination with physical oceanographic models, satellite remote sensing data, and current meters, we can start to see that the ecosystems and communities that exist around steep bathymetry are shaped by the interaction of physical flow and behavior. Steep slopes bring together communities that are normally separate and studied in isolation: the deep and the shallow, the offshore and the nearshore, the pelagic and the benthic, and it is this dynamic and complex web of interactions that make these habitats such interesting and important features in our oceans.

VIRTUAL! **Zoom:** https://whoi-edu.zoom.us/j/97000865816 Meeting ID: 970 0086 5816 **By phone**: Find your local number: https://whoi-edu.zoom.us/u/adIvMow3LQ