# The Laboratory of Tree-Ring Research

presents a talk by

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## *Forests, fisheries, and five centuries of North Pacific ecosystem variability*

Thursday, April 20, 2017 - 12:00pm to 1:00pm
Room: Bannister 110

Along North America's West Coast, winter sea level pressure is a top-down driver of coastal upwelling, precipitation, and river discharge. Remarkable coherence among these geophysical parameters induces covariance of biological productivity across marine and terrestrial ecosystems, as evidenced by growth-increment chronologies of fish, clams, and trees. Robust paleoenvironmental records indicate that these biologically-relevant winter climate patterns are dominated by low-frequency, 40-60 year periodicities at higher latitudes. In contrast, lower latitude systems are dominated by high-frequency patterns for which variance has sharply increased over the past century. Both mean and variability of winter climate impact biology, and have implications for ecosystem resilience and stability.

The University of Arizona