

Physics Colloquium

Agent-based simulation modeling of wetland plant invasions

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4:00 p.m.
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Nutrient pollution is a well-known environmental issue in agricultural regions like Iowa, where primary concerns involve cumulative downstream effects like drinking water quality and the Gulf of Mexico hypoxic zone, but less attention is given to the immediate localized effects of nutrient pollution. The most immediate local impacts can be seen in adjacent wetlands, where added nutrients change plant community composition and often lead to invasion by non-native invasive species. In this talk, I will describe my work using agent-based computer simulation modeling paired with experiments in the field to understand the mechanisms behind the dominance of non-native invasive species, and how I am using this model to inform land management decisions in wetland restoration projects in Saginaw Bay, Michigan.

Everyone Welcome! Refreshments Provided.