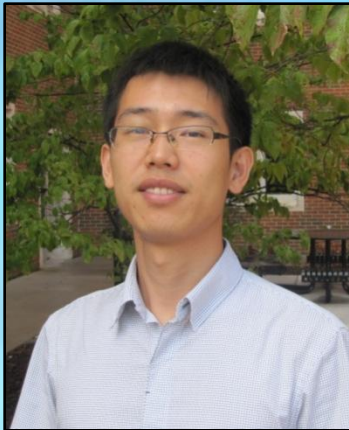




NIMBioS

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NIMBioS Interdisciplinary Seminar

Dr. Jiang Jiang
NIMBioS Postdoctoral Fellow

3:30 p.m.**, Tuesday, September 18, 2012

Hallam Auditorium, Room 206
Claxton Education Building, 1122 Volunteer Blvd.

“Modeling mangrove-hardwood hammock ecotone”

Coastal vegetation of South Florida typically comprises salinity-tolerant mangroves bordering salinity-intolerant hardwood hammocks or fresh water marshes. Empirical studies show that the boundaries between mangroves and hammocks in coastal ecotones of South Florida are sharp despite the gradual topography. Mechanisms under the sharp ecotone involve physiological and competitive properties of local vegetation, hydrologic processes such as precipitation, tidal fluxes, and salinities of groundwater. However, it is unclear how these interacting ecological-hydrologic processes contribute to the sharp ecotone, and whether the ecotone is vulnerable to regime shifts or resilient to change under disturbance. In this talk, I will 1) disentangle mechanisms of pattern formation on the mangrove-hardwood hammock ecotone by Individual Based Model, and 2) investigate possible vegetation regime shift triggered by storm surge events using simple mathematical model.

****Join us for refreshments at 3 p.m. in the 1st floor visitor breakroom.**

For more information about this and other NIMBioS Seminars, visit

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