Dear Faculty, IGERT Fellows, IGERT Associates and Students,

You are cordially invited to attend a Seminar presented by Asong Tambo.

Please plan to attend.

## Asong Tambo

IGERT Fellow Electrical Engineering

Date: Friday, November 8, 2013 Location: Bourns A265 Time: 11:00am

## Integrated Model for Understanding Pollen Tube Growth Dynamics in Video

## Abstract:

Existing pollen tube models use differential equations to represent complex intra-cellular interactions that lead to growth. As a result of this complex nature, these models are not used to verify the shape and growth behavior seen in experimental videos because the dynamics of some variables are not observable. We present a method of enhancing one such existing model to verify growth behavior in experimental videos. The proposed model explains changes in tube length and shape based by modeling observable phenomenon while making biologically relevant assumptions about the behavior of unobservable variables. Experiments conducted with the model show the model explains experimental videos.

Thank you,

