

Biomechanical Model of Plant Root Hair Growth

Dr. Sarah Eichhorn

October 14th 12:30 PM – 2:00 PM

Serra Hall 116

Refreshments will be served!



A mathematic model for studying the factors affecting root hair growth in the plant *Arabidopsis Thaliana* will be presented. The theoretical model results will be combined with experimental data to analyze the growth rate and tip shape of developing root hairs.

Mathematical tools used in this study include the linear elasticity theory, partial differential equations, least squares approximation, and basic statistics. This talk will be aimed at a general math audience and only a calculus background will be assumed for most of the material.