Postdoctoral Position in Plant Root Dynamics
Prof Daniel I Goldman, School of Physics
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A postdoctoral scientist position is available in Prof. Daniel Goldman’s group in the School of Physics at the Georgia Institute of Technology. The postdoc will lead an NSF funded effort to conduct laboratory experiments studying plant root dynamics, focusing on interactions of roots with soil and heterogeneities within. The biophysical aspects of the project, which will ask questions and use methods from genetics to biomechanics, involves close collaboration with Prof. Philip Benfey, a leading plant geneticist at Duke University. The project also involves “robophysical” (see this link for a review) and numerical modeling of root tip growth and exploration. The robotic aspects of the collaboration will benefit from interaction with Prof. Elliot Hawkes’ group at UC Santa Barbara; Hawkes is the inventor of a novel soft growing robot. Practical applications and broader impact of the work will benefit from Prof. Robin Murphey’s group at Texas A&M; Murphey is a world-leader in applying robots to disaster situations.

Applicants must have strong skills in laboratory experiment, and preference for candidates with experience working on biological systems (of all scales) will be given. Experience in numerical modeling of dynamical systems will be valuable. Excellent communication skills are critical.

Position to begin approximately January 2020; start date negotiable, includes competitive salary, benefits, collaborative opportunities among Georgia Tech, Duke and UC Santa Barbara, and travel budget. Screening of applicants will begin immediately and applications will be considered until the position is filled. To apply, please e-mail Daniel Goldman (daniel.goldman@physics.gatech.edu) a curriculum vitae (CV), a one-page statement narrating how your research interests and background are related to this position, and contact information for two references.

More information on the group’s research can be found at goldmanlab.gatech.edu. Georgia Tech is located in Atlanta, GA in the Midtown neighborhood – a vibrant, urban community:

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