SFB 924-/BZR – Kolloquium

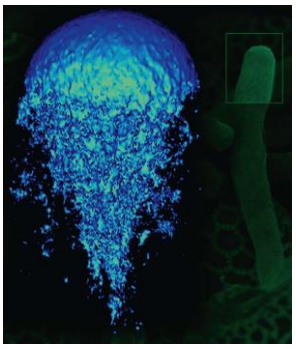
Thursday, 04. October 2018

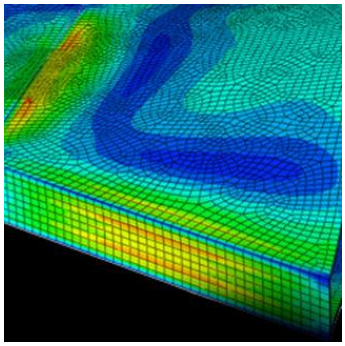
14:00 Uhr, H 53

Prof. Dr. Anja Geitmann
Biomechanics of Plant Development
McGill University Montreal (Canada)

“From polysaccharide to polyhedron – how plant cells make shapes.”

Plants are multicellular organisms that grow by cell division and cellular growth. These cellular processes occur at micron-scale, and they are subject to the mechanical constraints and physical laws. The Geitmann lab studies how internal and external forces act at macroscopic and microscopic levels to influence the development of a plant from embryo to adult, and to regulate the reproductive process. To do so, they combine molecular biology, cell biology and high-end imaging with micro-manipulation and mechanical modeling. With a main focus on pollen and trichome development they investigate the mechanical properties of the plant cell wall, e.g. during pollen tube growth through complex tissues and how general cellular shapes are generated. They use mathematical and computational modeling to simulate how plant cells grow, how they behave under an internal or external mechanical load, or in the context of a multicellular tissue.





Host: Prof. Dr. Thomas Dresselhaus

Universität Regensburg
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