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**Physikalisches Kolloquium**  
Einladung

**Physics Colloquium**  
Invitation

**Monday, 11 July 2022**

**BE AWARE – DIFFERENT TIME** Format: Online via ZOOM, at **14:00 hrs**

**Revealing the structural principles governing actin functions using  
*in situ* cryo-electron tomography**

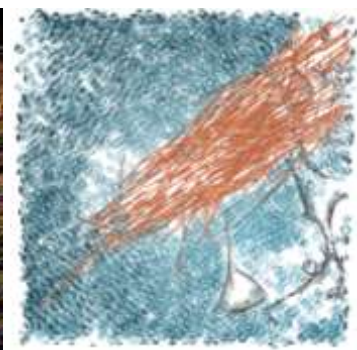
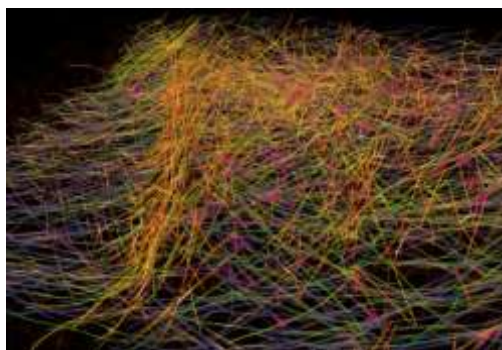
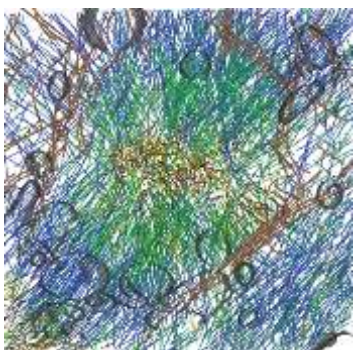
**Dr. Marion Jasnin**

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Actin contributes to an exceptionally wide range of cellular processes through the assembly and disassembly of highly dynamic and ordered structures. Little is known at the structural level about how the molecular players of the actin machinery cooperate inside cells to produce force-generating actin systems. In recent years, cryo-electron tomography (cryo-ET) has become the method of choice for structural analysis of the cell interior at the molecular scale. In this talk, I will give you a tour of our past and current cryo-ET work on various cellular actin structures, including actin waves, podosomes and sarcomeres, and show how it has begun to provide structural information about actin functions in cells across scales.



Host: Prof. Dr. Christof Gebhardt, Institute of Biophysics

Organisation: Prof. Dr. Jens Michaelis, Institute of Biophysics, [jens.michaelis@uni-ulm.de](mailto:jens.michaelis@uni-ulm.de), +49-731-50-23050