9:10 AM **Introduction**

9:15 AM
*Mechanical aspects of mitochondrial alterations in apoptosis*
Ana Garcia-Saez, University of Tuebingen

9:45 AM **Short Talk**
*Disassembling the Cytoskeleton: Effects of Adf/Cofilin on Actin Dynamics*
Hugo Wioland

10:00 AM **Short Talk**
*Vinculin Forms A Catch Bond With F-Actin That Depends on Actin Filament Orientation*
Derek Huang

10:15 AM
*Non-Equilibrium Phase Transitions in Actomyosin Cortices*
Nikta Fakhri, Massachusetts Institute of Technology

10:45 AM **Coffee Break**

11:15 AM Short Talk
*Genomic Variation in an Osteosarcoma Cell Line Caused by Pore Migration*
Jerome Irianto

11:30 AM
*Mechanical signalling in stem cells: self-renewal and ageing*
Kevin Chalut, University of Cambridge

12:00 PM
*The Mechanical Control of Nervous System Development*
Kristian Franze, University of Cambridge

12:30 PM **Lunch Break**

2:00 PM **Short Talk**
*Local Load-Bearing by Kinetochore-Fibers in The Mammalian Spindle Provides Mechanical Isolation and Redundancy*
Mary Elting

2:15 PM **Short Talk**
*Direct Observation of Strain Transmission through the Microtubule Network of Cardiomyocytes*
Matthew Caporizzo

2:30 PM **Short Talk**
*Nanoscale Architecture of the Actomyosin Cortex During Cell Division*
Binh An Truong Quang

2:45 PM
*How do single-cell properties influence the collective mechanical behavior of confluent tissues?*
Lisa Manning, Syracuse University

3:15 PM **Coffee Break**

3:45 PM  
*Mechanical control of tissue morphogenesis*  
Otger Campas, University of California, Santa Barbara

4:15 PM  
*Mechanical stretch triggers rapid epithelial cell division through the stretch-activated channel Piezo1*  
Jody Rosenblatt, University of Utah

4:45 PM **Short Talk**  
*Mechanoaccumulative Elements of the Mammalian Actin Cytoskeleton*  
Eric Schiffhauer

5:00 PM **Short Talk**  
*Physical Determinants of Bipolar Mitotic Spindle Assembly and Stability in Fission Yeast*  
Meredith Batterton

5:15 PM **Business Meeting**

6:30 PM **Speakers Dinner**

The Mechanobiology Subgroup is grateful for support from the following companies: