The first digit of your poster number leads you to your poster room.

Virtual Poster Session

(listed in order of submission)

1.1 **Rapid modulation of filament mechanics by charge modifications**
JULIA KRAXNER (University of Göttingen, Germany)

1.2 **Mechanical characterization of bladder cancer cells by means of Atomic Force Microscopy**
KAJANGI GNANACHANDRAN (Polish Academy of Sciences, Poland)

1.3 **Optoregulated force application to individual cellular receptors using molecular motors**
MITCHELL HAN (INM-Leibniz Institute for New Materials, Saarbrücken, Germany)

1.4 **Biomechanics of primary hippocampal neurons and SH-SY5Y cells in oxygen and glucose deprivation (OGD) model**
TOMASZ ZIELINSKI (Polish Academy of Sciences, Poland)

1.5 **Direct measurements of interactions between intermediate filaments**
ANNA V. SCHEPERS (Georg-August University Göttingen, Germany)

1.6 **Soft PDMS substrates make prostate cancer cells more resistant to vinflunine**
ANDRZEJ KUBIAK (Polish Academy of Sciences, Poland)

1.7 **Mechanical properties of vimentin versus keratin intermediate filaments can be explained by lateral subunit coupling**
CHARLOTTA LORENZ (University of Göttingen, Germany)

1.8 **EMT-induced cell-mechanical changes enhance mitotic rounding strength**
KAMRAN HOSSEINI (TU Dresden, Germany)

2.1 **Influence of tamoxifen resistance on the mechanical properties of breast cancer epithelial cells**
ANDREAS WEBER (University of Natural Resources and Life Sciences Vienna, Austria)

2.2 **Migration of natural killer (NK) cells from melanoma patients and healthy donors in a 3D collagen network: Implications for cancer immunotherapy**
TINA CZERWINSKI (FAU Erlangen-Nuremberg, Germany)

2.3 **Tabletop MR Elastography on primary tumor tissues: a pilot study on cervix and mamma carcinomas**
FRANK SAUER (Leipzig University, Germany)

2.4 **Non-monotonic relation between cell speed and density in expanding 2D epithelia**
MAXIME HUBERT (FAU Erlangen-Nuremberg, Germany)

2.5 **pyTFM: A tool for Traction Force and Monolayer Stress Microscopy**
ANDREAS BAUER (FAU Erlangen-Nuremberg, Germany)

2.6 **Cytoplasmic lipid droplets directly deform hepatocyte nuclei, reducing nuclear repair factors and increasing DNA damage**
ABIGAIL LONEKER (University of Pennsylvania, USA)

2.7 **Proliferation and cluster analysis of neurons and glial cell organization on nanocolumnar TiN substrates**
ALICE ABEND (Leipzig University, Germany)

2.8 **Infrared imaging to predict oral cancer development in oral epithelial dysplasia**
PETER WEIGHTMAN (University of Liverpool, UK)

3.1 **Elevation of keratin levels in reconstituted actin-keratin filament networks gradually increases their stress responsiveness**
IMAN ELBALASY (Leipzig University, Germany)

3.2 **Reptation of DNA nanotube tracers in semiflexible polymer networks**
TINA HÄNDLER (Leipzig University, Germany)

3.3 **Synchronization of cellular forces in spheroids from primary breast tumor-associated mesenchymal cells**
DAVID BÖHRINGER (FAU Erlangen-Nuremberg, Germany)

3.4 **Multiscale analysis reveals distinct cancer cell responses to environmental cues**
WOLFGANG LOSERT (University of Maryland, USA)

3.5 **Intermediate filament heterogeneity and its role in the mechanics of glioblastoma invasion**
EMMA VAN BODEGRAVEN (Institut Pasteur, France)

3.6 **Titanium dioxide nanotube scaffolds: versatile and customizable tissue culture platforms**
ASTRID WEIDT (Leibniz Institute of Surface Engineering (IOM) e.V., Germany)

3.7 **Cell and nucleus shape as an indicator of tissue fluidity in carcinoma**
STEFFEN GROSSER (Leipzig University, Germany)

3.8 **Friction in isotropic polymer networks**
PAUL MOLLENKOPF (Leipzig University, Germany)