



PROGRAM

Date: July 5, 2019

Venue: Theoretical Lecture Hall, Faculty of Physics and Earth Sciences, Linnéstr. 5, 04103 Leipzig

09:00–09:15	Meeting of the Members of the Institute
09:15–09:20	Welcome
09:20–09:40	Biophysical model of target recognition by CRISPR-Cas surveillance complexes <u>Marius Rutkauskas</u> , Ralf Seidel
09:40–10:00	Active particles with delayed interactions <u>Alexander Fischer</u> , Frank Cichos
10:00–10:20	Application of genomics data and bioinformatics database to biophysics researches Senol Dogan
10:20–10:40	Constraining polymers on the nano-scale Martin Treß
10:40–11:00	Break
11:00–11:20	Janus swimmers in heterogeneous activity fields <u>Sven Auschra</u> , Nicola Söker, Viktor Holubec, Paul Cervenak, Frank Cichos, Klaus Kroy
11:20–11:40	How electron can help to develop smart bio-hydrogels <u>Stefanie Riedel</u> , Stefan G. Mayr, Bastian Klaus
11:40–12:00	Characteristics and performance of modified hydrogels with incorporated magnetic nanoparticles <u>Philine Hietschold</u> , Marie Deuflhard, Stefanie Riedel, Nils Wilharm, Stefan Mayr, Mareike Zink
12:00–12:20	Compression of single DNA molecules in a thermophoretic trap <u>Tobias Thalheim</u> , Jasmina Dikic, Klaus Kroy, Ralf Seidel, Frank Cichos
12:20–14:00	Poster Session and Lunch (Aula/Corridor)
14:00–15:00	Peter Debye Lecture: Time-dependent mechanics of biopolymer materials – from protein condensates to the actin cytoskeleton Elisabeth Fischer-Friedrich
15:00–15:15	Break
15:15–15:35	Simulation of a large polymer with untruncated interaction near the collapse <u>Stefan Schnabel</u> , Wolfhard Janke
15:35–15:55	Nano-electronic components built from DNA templates <u>Jingjing Ye</u> , Richard Weichelt, Alexander Eychmüller and Ralf Seidel
15:55–16:15	Fibril dynamics by NMR relaxation and MD simulation <u>Albert A. Smith</u> , Daniel Huster, Matthias Ernst, Sereina Riniker, Beat H. Meier
16:15–16:35	Thermo-osmotic flows in electrolyte solutions <u>Martin Fränzl</u> , Frank Cichos
16:35–16:55	The physics of carcinomas: A multi-scale analysis on primary tumor tissues <u>Erik W. Morawetz</u> , Frank Sauer, Steffen Grosser, Thomas Fuhs, Benjamin Wolf, Sonja Kallendrusch, Hans Kubitschke, Hannah-Marie Scholz-Marggraf, Jürgen Lippoldt, Mareike Zink, Ingo Bechmann, Susanne Briest, Lars-Christian Horn, Bahriye Aktas, Josef A. Käs
16:55–18:00	Poster Session (Corridor)
18:00	Barbecue