



SGABU project - Increasing scientific, technological and innovation capacity of Serbia as a
Widening country in the domain of multiscale modelling and medical informatics in
biomedical engineering

Workshop 2 – *Multiscale models*

September 30th, 2021 (online)

10:00-10:05	Welcome note Prof. Nenad Filipovic, University of Kragujevac
10:05-10:35	<i>Multiscale modeling: micro-to-macro scale transitions and homogenization</i> Prof. Christian Hellmich, TU Wien
10:35-11:05	<i>Molecular dynamics modeling with AMBER: force fields, simulations, and behavior DNA</i> Dr. Johannes Kalliauer, TU Wien
11:05-11:35	<i>Modelling of Composites under Extreme Loading using Coupled FEM – SPH</i> Prof. Nenad Djordjevic, Brunel University London
11.35-11.50	<i>Short break</i>
11.50-12.20	<i>Particle-based models for simulation of active tissue rheology</i> Prof. Bart Smeets, KU Leuven
12.20-12.50	<i>Micro, meso and macro scales for multiscale modeling in atherosclerosis</i> Prof. Themis Exarchos and Dr. Gianna Karanasiou, University of Ioannina
12.50-13.20	<i>Multiscale finite element models for drug delivery and electrical conduction within tissue based on the smeared physical fields</i> Prof. Milos Kojic, Methodist Hospital Research Institute, Houston

Note: 25 minutes is planned for the lecture and 5 minutes for questions by students and other participants.

Link to the workshop: <https://bbb.unic.kg.ac.rs/b/nen-pv9-wce-u8z>



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