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S E M I N A R
on
Semiconductor Physics and Nanotechnology

Mo, 09.10.2023, 11:15 Uhr,

Seminar in
person in the Physics lecture hall *or* via Zoom

"Advanced Computational Material Engineering for Two-Dimensional and Layered Systems"

Dr. Jelena Pesic

Chair of Physics, Department Physics, Mechanics and Electrical Engineering, Montanuniversität Leoben, Austria

Advanced computational material engineering techniques represent one of the cornerstones of progress in modern materials science, driving innovation and discovery. This approach harnesses the power of advanced computational techniques to design, analyze, and optimize materials within the intricate realm of 2D and layered systems. It opens new frontiers for enabling breakthroughs in fields ranging from nanotechnology to renewable energy and beyond, offering unprecedented opportunities for innovation and discovery. During the presentation, a concise overview of various research endeavors will be provided, each exemplifying the application of computational studies in the exploration of diverse aspects of 2D materials research. These include manipulation of properties of materials using nano-mechanical modification (strain engineering in 2D materials), the design of van-der-Waals heterostructures, research of magnetic systems and tuning of properties in superconductors. These studies promise pathways to applications across a multitude of fields, highlighting the expansive potential of computational materials engineering.

Zoom – Link:
https://zoom.us/j/96375934537?pwd=RTlKTWhSdzRHU211YTY1bGFxTUtpZz09
Meeting-ID: 963 7593 4537
Kenncode: =r=4YQ