Deutsches Elektronen-Synchrotron DESY
Ein Forschungszentrum der Helmholtz-Gemeinschaft

NanoMat Science Day 2021

Date: February 11th, 9 am. – 6 pm.
Virtual Workshop; all participants will automatically receive the log-in data
The poster-session via Remo is open to all topics.

This year the topics and chairs will be:

1. Hierarchically structured materials under complex environments; Ulrich Lienert, Hanns-Peter Liermann
2. Water in confinement and technology; Heshmat Noei, Claudia Goy
3. materials and x-ray methods for quantum computing; Martin Beye, Kai Rossnagel

Hierarchically structured materials under complex environments Ulrich Lienert, Hanns-Peter Liermann		
9-9.10	In situ microstructure characterization by high-energy diffraction, scattering, and imaging	Ulrich Lienert
9.10-9.25	X-ray line profile analysis and what it can reveal about the microstructure of metals	Zoltan Hegedues
9.25-9.40	A scattered view at the nano-scale: high-energy SAXS for in situ materials characterization	Malte Blankenburg
9.40-10.00	Self-Assembly of Soft Matter in Nanoporous Solids for Adaptive Multifunctional Metamaterials	Patrick Huber
10.00-10.05	Using high-pressure devices to synthesize and characterize industrial relevant materials	Hanns-Peter Liermann
10.05-10.25	Synthesis of Novel Nitrides using the Large Volume Press @ P61B	Shrikant Bhat
10.25-10.40	Conditioning of Mg3(Bi1-xSbx)2 properties by high pressure: a closer look at the end-member	Weiwei Dong
10.40-11.00	Studying the mechanical and elastic properties of nanocrystallyne ceramics, metals and geomaterials at extreme conditions	Sergio Speziale
11.00-11.10	coffeebreak	
Water in confinement and technology Claudia Goy, Heshmat Noei		
11.10-11.25	Introduction	Claudia Goy, Heshmat Noei
11.25-11.45	X-ray reflectivity measurement of water confined in nano-gap	Milena Lippmann
11.45-12.05	Fast and ultrafast dynamics of liquid surfaces	Svenja Carolin Hoevelmann
12.05-12.25	Monitoring the Ultrafast Dynamics During Photocatalysis at the Interface of Water and TiO_2	Michael Wagstaffe
12.25-12.45	Layer-by-layer Spray Coating of Cellulose Nanofibrils and Silver Nanoparticles for Hydrophilic Interfaces	Qing Chen
12.45-13.05	Real-Time Investigations during Sputter Deposition on Polymer Thin Films	Matthias Schwartzkopf
13.05-14.05	lunchbreak and poster presentation via Remo	

Materials and X-ray methods for quantum computing Martin Beye, Kai Rossnagel		
14.05-14.10	Introduction	Martin Beye, Kai Rossnagel
14.10-14.30	Active Sites of Te in Hyperdoped Si by Hard X-ray Photoelectron Kikuchi-Diffraction	Moritz Hoesch
14.30-14.50	RIXS using photoelectron detection - towards an alternative to 10m-long spectrometers	Jan Schunck
14.50-15.10	Topological Insulator/Ferromagnet Heterostructures - Sample Design and First Photoelectron Spectroscopy Results	Simon Marotzke
15.10-15.30	Coherent control of collective nuclear quantum states via transient magnons	Lars Bocklage
15.30-16.00	Discussion of a FS/NanoMat Proof-of-Concept Experiment “X-rays meet Qubits”	Martin Beye, Kai Rossnagel, all
16.00-16.05	Wrap-up	Andreas Stierle
16.05-18.00	Coffee Break and Poster presentation via Remo	