

## Program for Meeting on Defects in 2D Materials

Date: November 14<sup>th</sup>, 2022

Place: HZDR, Bautzner Landstr. 400, 01328 Dresden

Room: Large Auditorium (106/255)

10:00 Arrival, registration, coffee

### Chair: Martin Kalbac

10:30 **Sebastian Schmidt**: Opening and Welcome

10:35 **Martin Hof**: Welcome Address

10:40 **Otakar Frank, Artur Erbe**: Introduction to existing and planned collaborations

10:45 **Signature of cooperation agreement**

### Chair: Artur Erbe

10:55 **Otakar Frank**: Nanoscale probing of van der Waals interactions, deformation, and charge in TMDCs in the ambient

11:30 **Rajarshi Roy**: Raman spectroscopic investigation of defects in suspended MoS<sub>2</sub>/Graphene heterostructure generated by He<sup>+</sup> ion bombardment

11:45 **Haider Golam**: Van der Waals antiferromagnets for efficient detection of optical polarization

12:00 **Arkady Krashenninikov**: Ion irradiation of MoS<sub>2</sub>/graphene nanostructures

12:30 **Rene Heller**: Low Energy Ion Nano-Engineering Facility (LEINEF) and Medium Ion Energy Scattering (MEIS)

13:00 Lunch

14:00 Guided tour through **IBC**

### Chair: Jürgen Fassbender

15:00 **Jaroslav Kočíšek**: Interaction of ionizing radiation with DNA

15:20 **Nikol Lambeva/Zahra Fekri/Artur Erbe**: Stacking, twisting, and modifying 2D materials: Current status

15:50 **Luka Pirker**: Local spectroscopic and scanning probe microscopy signatures of (defects at) TMDC/metal interfaces

16:10 Coffee break

### Chair: Otakar Frank

16:40 **Yi Li**: Ion implantation in 2D materials

17:00 **Michele Gastaldo**: Unveiling aspect ratio and strain scaling in MoS<sub>2</sub> nanobubbles on Au

17:20 **Martin Jindra**: Basal plane vs. defect-related charge-transfer processes in graphene

17:50 End of session

18:15 Departure for dinner location

**19:30** Dinner: Watzke am Goldenen Reiter, Hauptstraße 1, 01097 Dresden (by invitation)