



DGKK Seminar on Growth Kinetics, Layer Transfer of Ultrathin Layers and 2D Materials

September 15-16, 2025

hosted at Leibniz-Institut für Kristallzüchtung (ikz), Berlin

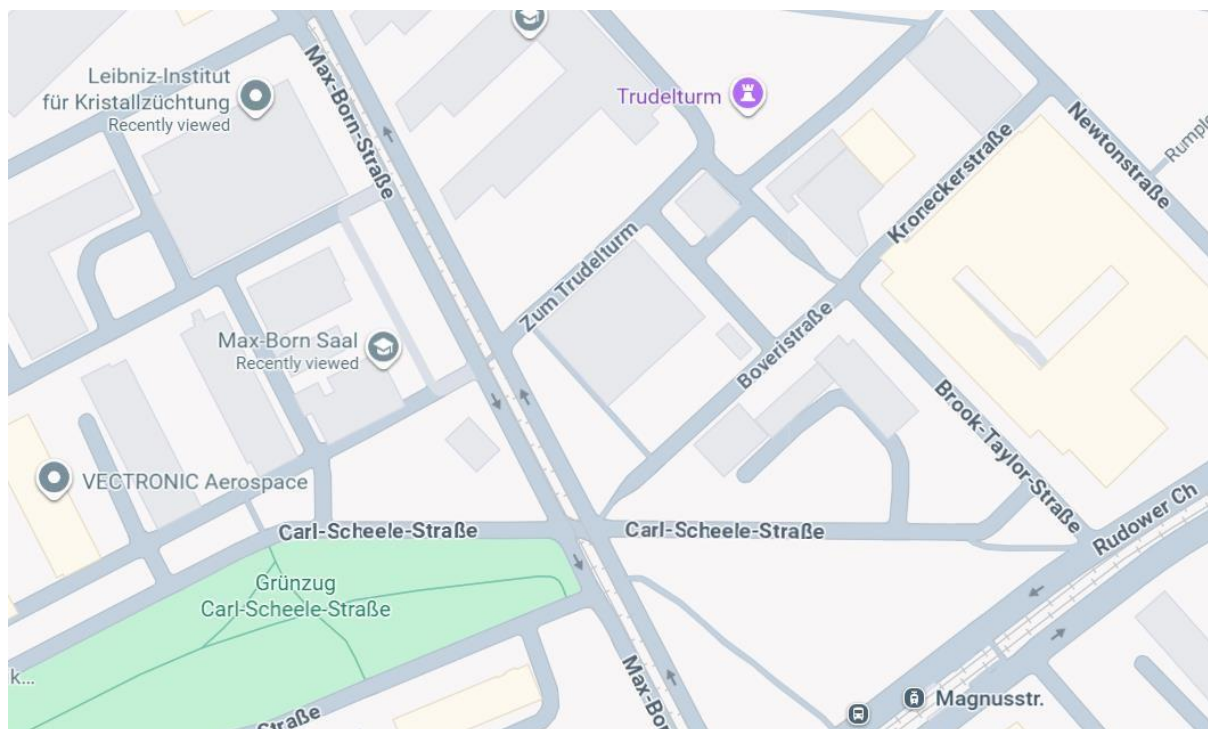
The 2025 seminar will be the 3rd instalment of the new seminar series.

A special focus will be placed on 2D layer growth by various methods, free standing perovskite films and ultra-thin semiconductor films.

We are aiming to bring together researchers from different communities to discuss emerging topics in these fields.

Participation is free and open to everybody (DGKK members and non-members).

Location: MBI-Saal, next to ikz



The common dinner on Monday evening will be a good opportunity for networking and discussing future perspectives.

time Monday, 15.9.2025

13:00 Welcome

Freestanding oxides

13:10 Varun Harbola, MPI Stuttgart Heterointegration and interface design beyond epitaxy
13:50 Lambert Alff, TU Darmstadt Oxide membranes of highly conducting transparent perovskites and tunable dielectrics: From fundamentals to applications
14:30 Jutta Schwarzkopf, IKZ Strain engineering and phase transitions in heteroepitaxially grown (K,Na)NbO₃ films and freestanding membranes
15:10 Jeremy Maltitz, IKZ twisted perovskites via transfer bonding: XRD investigations

15:30 **Coffee break & Group photo!**

Growth of 2D-vdW materials

16:00 Sergey Sadofiev, IKZ 2D materials and “2D goes 3D” strategy at Leibniz-Institut für Kristallzüchtung
16:20 Yingfang Ding, RWTH Aachen MOCVD of Monolayer WS₂ on 4H Conductive SiC Substrates
16:40 Tobias Deußen, RWTH Aachen From Monolayer to Bilayer WSe₂: Water-Assisted MOCVD and Characterization
17:00 Coffee break

Growth and characterization of ultrathin SiGe layers

17:30 Kevin Gradwohl, IKZ Enhanced nano-scale Ge concentration oscillations in Si/SiGe quantum well via controlled segregation
17:50 Sebastian Heeg, HU Berlin Surface-Sensitive and Bulk-Suppressed Raman Scattering by Transferable Nanoporous Plasmonic Membranes
18:30 end of lectures

19:00 Dinner

Tuesday, 16.9.2025**Simulation and Theory of 2D-growth**

09:00 Nadire Nayir, PDI Berlin From Growth Kinetics to Layer Transfer: Atomic-Scale Simulations of 2D Materials
09:40 Cem Sanga, PDI Berlin Doping-Induced Modulation of Structural and Electronic Properties in Transition Metal Dichalcogenides
10:00 Wolfram Miller, IKZ First results of kinetic Monte Carlo computations for growth of 2D materials

10:20 Coffee break

Novel 2D-materials

10:40 Hongde Yu, TU Dresden Organic 2D Crystals and Metal-Free Magnetism
11:20 Marcelo Lopes, PDI Berlin Epitaxial growth of 2D materials and van der Waals heterostructures
12:00 conclusion of workshop

Who is interested in an ikz-tour?