

*Exploration of nanoscale thermal transport and thermoelectric phenomena in 2D materials via scanning probes (Oleg KOLOSOV)*

Nanoscale thermal transport is one of the most difficult physical properties to probe and measure. The lecture describes methodology and challenges of different types of Scanning Thermal Microscopies (SThM) and their application to nanoscale mapping and measurements of local thermal conductivity, interfacial thermal resistance and thermoelectric properties of 2D materials. It is up to date account of novel approaches developed in the world leading research labs in the field.