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HS 012, Hörsaalgebäude, Reichenhainer Str. 90 und online via ZOOM

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Two-dimensional materials-based nanostructures for quantum technologies

Next-generation quantum technologies will require building blocks with fundamentally new (quantum) functionalities. How can we use the ever-growing family of two-dimensional materials, offering us versatile and highly tunable properties, to develop innovative quantum technologies?

I will report some examples from my recent work on the tunability of several 2D materials, e.g., by twisting, external fields, strain, and gating. I will demonstrate how the material's properties translate into nanostructures such as electrostatically induced bilayer graphene quantum wires and dots. Building on this, we will develop ideas for two-dimensional materials-based components for quantum technologies.

ZOOM-Link:

<https://us02web.zoom.us/j/82310833626>

