Kolloquium Physik

Thema: The Perfect Wave

Vortragender: Prof. Dr. Achim Wixforth
Universität Augsburg

Ort: Hörsaalgebäude II
Hörsaal 2

16:30 Uhr

Kolloquiums-Kaffee ab 16:00 Uhr
im Raum P2-E0-414
(Alle sind herzlich eingeladen)
Many materials provide quite remarkable features in terms of their mechanical, electronic, magnetic or optical properties. Semiconductor structures and layered systems thereof for example have revolutionized our daily life over the last few decades. Moreover, if reduced to the nanometer scale, a wealth of novel properties and physical effects emerged that are partially already exploited technologically. However, some other materials have their own particular specialities that cannot be accomplished by semiconductors alone. By the deliberate realization of hybrid nanostructures consisting of semiconductors and piezoelectric oxides, or soft matter materials like supported membranes and elastomers we are able to create functional nanosystems that aim towards ‘the best of both worlds’ in such hybrids. In my talk, I will present a few examples for functional hybrid nanosystems for photonic, electronic and even medical/biological applications. By letting *Surface Acoustic Waves* interact with these hybrids, novel tunable functionalities can be created that are only possible by combining very different material classes.