

# Eugene Wigner Colloquium

*joint event of GRK 1558 and SFB 910*



## Prof. Katharina Krischer

TU München

### “Spatial coexistence of different patterns in oscillatory media: how common is it?”

Chimera states, the counterintuitive coexistence of synchronized and desynchronized regions in an otherwise isotropic system, have received considerable interest during the last decade. Meanwhile, many different chimera states have been reported in experiment and theory and different mechanisms leading to their emergence are known.

In the talk I will discuss experiments on silicon electrodisolution and their modeling with a modified complex Ginzburg Landau equation. The studies demonstrate that the chimera states are embedded in a series of related coexistence patterns, showing a similar level of seemingly contradictory behavior in the coexisting regions. An example is the coexistence of a cluster pattern and a desynchronized region. In a wider sense, the coexistence of disparate patterns can be seen as diversification of the dynamical behavior of a system with uniform parameters.

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**Thursday, 04.02.16 · 16:15h · EW 202**

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