

Announcement

## Seminar on Deformation Quantization

**4. 2. 2022 at 2pm CET**

Hybrid Seminar in SE 30 and

<https://uni-wuerzburg.zoom.us/j/92529190594?pwd=WkJvR1o1QUdldUNSSjFJbHB4c0Z0dz09>

MARTINA FLAMMER (JMU WÜRZBURG)

Persistent Homology and its applications

Persistent Homology (PH) is the main method in topological data analysis, which is a field that can be seen as an intersection of topology, geometry and data analysis. PH arose due to the necessity to describe the structure of spaces on which data was sampled. Using tools from algebraic topology, it provides connectivity information of the underlying space on several spatial scales. In my talk, I will give an overview over the topic of persistent homology, ranging from the original formulation in the early 2000's to its extensions and applications. I will draw special attention to the structure of persistence modules and their generalizations as well as the application of PH to time series analysis.

Invited by Stefan Waldmann