

## **A general symbolic approach to nonlinear data analysis**

KARSTEN KELLER, INGA STOLZ

*Universität Lübeck, Europa-Universität Flensburg*

Using symbolizations to study observed data plays an important role in nonlinear time series analysis. Particularly, the Kolmogorov-Sinai entropy as a measure quantifying complexity of dynamical systems and data coming from it is based on the idea of symbolization. Here the problem is to find symbolizations which contain enough information on the system, as in the ideal case symbolizations associated to generating partitions do. Such partitions are usually not a priori given or not practicable. In this talk we describe a general symbolic approach providing a direct route to Kolmogorov-Sinai entropy and discuss it in relation to known symbolization strategies.