



## Skalenkaskaden in komplexen Systemen

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### **Cascades of Scales in a tropical vortex**

#### Abstract:

The processes leading to the establishment and maintenance of tropical vortices, from strong tropical storms to hurricanes or taifuns, involve a broad range of length and time scales induced by fluid mechanical and thermodynamic effects. This talk will summarize processes that are known to contribute and elucidate their length and time scaling structure. These considerations will imply what is a minimal set of mathematical modelling components that need to be incorporated in a reduced dynamical model for a developing storm that may explain the underlying physics "from bottom up".