

#33 Topic: Transitions, resilience and self-organization of complex ecosystems.

Leading researcher: Prof.dr.ir. Max Rietkerk, Spatial Ecology and Global Change

Abstract:

Critical transitions and self-organization are crucial concepts to understand the dynamics and adaptation of complex ecosystems. I will present a brief history on the critical transitions concept and its application to a variety of systems. I will link this to self-organization and show how this is related to early warning indicators for critical transitions. Some of the evidence for early warning signals will be reviewed. I will scale from ecosystem to global scales and infer from most recent research that complex systems are more adaptive than currently thought.