



**Ben-Gurion University of the Negev
Blaustein Institutes for Desert Research**

The Swiss Institute for Dryland Environmental and Energy Research
Alexandre Yersin Department of Solar Energy and Environmental Physics

Spatial Ecology & Singular Perturbations

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Abstract:

Pattern formation in ecological systems is typically driven by counteracting feedback mechanisms on widely different spatial scales. In terms of the associated models, this means that ecological patterns are singular and that their behavior can be studied from the point of view of (geometric) singular perturbations.

In this talk we will give an overview of how the rich cross-fertilization between ecology, the physics of pattern formation and the mathematics of singular perturbations both provides novel insights in the crucial role played by patterns in ecosystems and in the general theory of the dynamics of patterns.

Date & Location:

Tuesday, December 21, 2021, 11:00

Zoom Meeting