





## **SEMINARIO**

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## Modelling critical transitions: results on d-concave equations and applications in population ecology

**Abstract:** Nonautonomous equations are appropriate models when considering populations affected by time-varying phenomena such as climate variability or the alternation of seasons. In this talk, we discuss nonautonomous scalar equations with concave derivative, which are particularly suitable for modelling populations subject to Allee effect. Asymptotic transitions between a past and a future given by equations of this type are considered. A classification result on the dynamics of such transitions is presented and illustrated with numerical simulations.

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