



Crédit : Vasilis Dakos



Les Jeudis de l'UMR

JEUDI 03 AVRIL 2025 / 11h30 **Vasilis DAKOS** CNRS, Institut des Sciences de l'Evolution de Montpellier (ISEM)

## Detecting fisheries productivity trajectories at-risk to abrupt shifts

Fish population biomass fluctuates through time in ways that may be either gradual or abrupt. While abrupt shifts in fish population productivity have been shown to be common, they are rarely integrated into stock assessment or fishery management, in part because of the difficulty of predicting when abrupt shifts may occur and which stocks are prone to such shifts. We propose to address this challenge by designing a mechanism-agnostic context-specific approach that is based on exploiting the dynamical properties of fish population fluctuations for detecting potential abrupt shifts.

In this talk, I will present how our approach works using time series of fish population biomass from three global datasets, first, for classifying their shapes into abrupt and non-abrupt classes, and, second, for predicting classified shapes based only on their dynamical footprint.

> accès zoom

<https://umontpellier-fr.zoom.us/j/92045795456>  
ID de réunion : 920 4579 5456

> prochainement



Jeudi 10 avril 2025 à 11h30 : Olivier Maury, IRD, MARBEC  
"Can we build a "physics-like" theory of marine ecosystems? APECOSM, a climate-driven mechanistic model of marine ecosystems for global and regional analyses & projections"

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+ programme & archives

Programme des Jeudis et archives des 8 dernières présentations disponibles sur : <https://umr-marbec.fr/category/seminaires-marbec/>

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