



DEPARTAMENTO  
DE MATEMÁTICA  
APLICADA



# SEMINARIO DE MATEMÁTICA APLICADA

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### Stabilization of a non linear model for fish population

This talk is about the stability property of a stage structured discrete-time nonlinear model fish population with the Beverthon-Holt recruitment relationship. Using the Lyapunov method, we show that the positive equilibrium state of the stage structured model fish population is globally and asymptotically stable when the fishing intensity is constant. Since the fishing intensity is often variable, we also show how a variable fishing intensity may be controlled through feedback in order to stabilize the state fish population around a positive equilibrium state of the model.

Organizado por el grupo UCM MOMAT,  
con la colaboración del Departamento de Matemática Aplicada y del IMI

**Fecha: Martes 19 de septiembre de 2017**

**Hora: 11:00 horas**

**Lugar: Aula 209 (Seminario Alberto Dou)**

**Facultad de CC Matemáticas, UCM**