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COMPLUTENSE  
MADRID

Kalman Filter  
Runge-Kutta  
Algorithm

$$\dot{x}(t) = rx(1-x/K)$$

$$x_{t+\Delta t} = f_{RK}(x_t)$$

# International Seminar on Continuous vs Discrete-Time Bioeconomic Models: Seasonal Fisheries

Tuesday, 17 November 2015, 11.45 h.

Universidad Complutense de Madrid  
Facultad de Ciencias Económicas y Empresariales  
Salón de Grados del Pabellón Central (Decanato)  
Campus de Somosaguas, Pozuelo de Alarcón (Madrid)

11.45-12.00 Welcome speech: NILS science and sustainability project “Stochastic bioeconomic and population dynamics modeling of collapsed fisheries”. José María Maroto Fernández (UCM)

12.00-12.45 A bridge between continuous and discrete-time bioeconomic models: Seasonal fisheries.  
José María Maroto Fernández (UCM)

12.45-13.30 Stock assessment methods and reference points for Northeast Atlantic fish stocks.  
Carmen Fernández (ICES)

13.30-14.15 Some important aspect in Ecosystem Based Fishery Management (EBFM) of commercial fisheries.  
Leif K. Sandal (NHH)

14.15-15.00 From deterministic to stochastics: modeling and numerics. Carlos Vázquez Cendón (UDC)

16.00-16.45 Battling seasonality – experiences from norwegian interventions to smooth supply.  
Øystein Hermansen (NOFIMA)



Contact

José María Maroto Fernández  
Complutense University of Madrid  
Dept. of Statistics and Operations Research II  
maroto@ccee.ucm.es  
grupoecofractal.com/en/projects