

## ABSTRACTS

### TUESDAY 9

11:45 – 12:00 OPENING

12:00 – 13:00 Introductory Talk

13:00 – 14:30 LUNCH

14:30 – 14:55 [Talk: J. Borge \(Coexisting patterns in n-dimensional ecosystems\)](#)

14:55 – 15:20 [Talk: D. Gomila \(Pattern formation in Posidonia Oceanica meadows\)](#)

15:20 – 15:45 [Talk: F. Cao \(Spatial scales of population synchrony: effects of competition, predation and harvesting\)](#)

15:45 – 16:15 COFFEE BREAK

16:15 – 16:40 [Talk: E. Hernández-García \(Modeling the connectivity of marine populations by Lagrangian flow networks\)](#)

16:40 – 17:05 [Talk: G. Bunin \(Models of ecological communities: genericity and collective phenomena\)](#)

17:05 – 17:30 [Talk: J. Fernández \(Inferring social relations from presence data. Manta Rays case study\)](#)

### WEDNESDAY 10

09:00 – 09:50 Keynote talk: Jens Krause

09:50 – 10:15 [Talk: M. Lukovic \(Sub-diffusive behaviour of benthic copepods – evidence for active counter-current swimming and drift avoidance in advective media\)](#)

10:15 – 10:40 [Talk: F. Peters \(Small-scale physical-ecological interactions in the ocean: The case of turbulence and plankton\)](#)

10:40 – 11:30 COFFEE & POSTERS

11:30 – 12:20 Keynote talk: Andreas Huth

12:20 – 12:45 [Talk: J. Alòs \(How ecology shapes optimal collective searching behaviour in uninformed human foragers\)](#)

12:45 – 13:10 [Talk: G.M. Palamara \(A stochastic age-structured population model to quantify sublethal effects of pesticides on Daphnia clonal populations\)](#)

13:15 – 14:30 LUNCH

14:30 – 15:20 Keynote talk: Gonzalo Polavieja

15:20 – 15:45 [Talk: G. Madirolas \(Predicting the outcome of chemotaxis without behavioral details\)](#)

15:45 – 16:10 [Talk: E. Colombo \(Species mixing determines predators' optimal perception range and coexistence times in predator-prey dynamics\)](#)

16:10 – 16:35 [Talk: J. Lukas \('La Olá' waves of the sulphur molly: integration of multiple predator cues in an extreme environment\)](#)

16:35 – 17:00 [Talk: A. Campos \(A mechanistic framework linking behaviour with dynamic energy budgets to test personality-dependent movement behaviour\)](#)

17:30– 21:30 SOCIAL EVENT & DINNER

### THURSDAY 11

09:00 – 09:50 Keynote talk: Mercedes Pascual

09:50 – 10:15 [Talk: A. Dobson \(Joining the Dots – Using Generalized Consumer Resource Model to understand the dynamics of two large terrestrial ecosystems: Serengeti and Yellowstone\)](#)

10:15 – 10:40 [Talk: V. Baulin / M. Werner \(Machine learning methods in ecology: a new field for physicists\)](#)

10:40 – 11:05 [Talk: J.A. Capitán \(Coexistence of many species in large ecosystems: The problem of the random zoo\)](#)

11:05 – 11:35 COFFEE BREAK & POSTERS

11:35 – 13:15 FINAL DEBATE: PHYSICS & ECOLOGY

13:15 – 13:30 CONCLUDING REMARKS