

# *Biomathematics Seminar 2018*

*10th Edition*

*Heraklion, 12-15 June 2018*

## *Programme*

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	<b>Tuesday 12</b>	<b>Wednesday 13</b>	<b>Thursday 14</b>	<b>Friday 15</b>
<b>Morning</b>	<b>Paris Orly - Heraklion (06:00 - 10:35)</b>	<b>Bali</b>	<b>Data Science Challenge</b>	<b>Heraklion - Paris Orly</b>
<i>Lunch</i>	<i>Herbs Garden Restaurant (12:00)</i>	–	<i>Cocktail Lobby Bar (13:00)</i>	<b>(11:20 - 14:10)</b>
<b>Afternoon</b>	<b>Presentations (13:30 - 19:30)</b>	<b>Rethimno</b>	<b>Data Science Challenge</b>	
<i>Dinner</i>	<i>Herbs Garden Restaurant (20:30)</i>	–	–	

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# Oral Presentations

12 June

## **Session 1 : Modelling and Inference for Dynamical Systems**

Chair: Gautier Viaud

13:30 - Antonin Della Noce

*Population with Interactions : from Mean-Field Limit to Mean-Field Approximation*

13:55 - Sarah Lemler

*Estimation on a new Jump-Diffusion Model driven by a Hawkes Process*

14:20 - Véronique Letort - Le Chevalier

*Dynamic Models in Epidemiology*

14:45 - Mahmoud Bentrion

*Data Assimilation with Regularized Particle Filter in an Epidemiology Model*

15:10 - Andreas Markoulidakis

*From MCMC to No-U-Turn Sample through Hamiltonian Dynamics*

15:35 - Paul-Henry Cournède

*Automatic Relevance Determination in Bayesian Neural Networks*

16:00 - Coffee Break

## **Session 2 : Statistical Learning in Medicine and Agronomy**

Chair: Véronique Letort

16:15 - Gautier Viaud

*Integrative Clustering of Multi-Omics Data*

16:40 - Mathilde Sautreuil

*Screening Methods for Survival Analysis*

17:05 - Benoit Bayol

*From Radiologists' Experiences to Challenges in AI*

17:30 - Chloé Adam

*Dynamic Monitoring of Software Use with LSTM Recurrent Network: Next Action Prediction and Crash Risk Detection*

17:55 - Walid Hammache

*Crop Recognition from Sequential Sentinel-1 Images with an LSTM Recurrent Network*

18:20 - Samis Trevezas

*Estimating Crop Progress with Remote Sensing and Meteorological Data - A Case Study*

18:45 - Xiangtuo Chen

*Application of Weighted Regression for the Prediction of Soft Wheat Production in France*