

# Mathematical Epidemiology, Amphithéâtre Hermite, IHP, February 7th to 9th, 2022

## Monday February 7

14:00 - 14:15 Welcoming of participants

14:15 - 15:00 Laura Temime (CNAM): Modelling SARS-CoV-2 spread within healthcare settings: estimating transmissibility and assessing interventions.

15:00 - 15:45 Samuel Alizon (CNRS): From incidence data to PCR test cycle threshold values: how epidemiological data interacts with mathematical modelling.

15:45 - 16:15 Break

16:15 – 17:00 Bernard Cazelles (Sorbonne Univ.): Mathematical and statistical approaches for accounting non-stationarity in epidemiology.

## Tuesday February 8

10:00 - 10:45 Odo Diekmann (Univ. Utrecht): Tribute to Kermack-McKendrick.

10:45 - 11:30 Jean-Michel Roquejoffre (Univ. Toulouse): Models for biological invasions driven by a line of fast diffusion.

11:30 - 12:00 Break

12:00 - 12:45 Youcef Mammeri (Univ. Picardie) : Spatio-temporal modelling of plant-pathogen lesions dynamics.

Lunch break and discussion

14:30 - 15:00 Luis Almeida (Sorbonne Univ.): Mathematical models for pest and disease-vector control.

15:00 - 15:30 Yannick Privat (Univ. Strasbourg): Mathematical modeling of alternative techniques to control vector-borne diseases

15:30 - 16:00 Break

16:00 - 16:30 Jesus Bellver Arnau (Sorbonne Univ.): Mosquito population and epidemiological control using mosquito release.

16:30 - 17:00 Alexis Leculier (Sorbonne Univ.): Analysis and optimization of two "Rolling carpet" strategies to repulse an invasion.

## Wednesday February 9

10:00 - 10:45 Carlota Rebelo (Univ. Lisbon): On a SIS model with heterogeneity in susceptibility.

10:45 - 11:30 Mircea Sofonea (Univ. Montpellier): Modelling the COVID-19 epidemic in France in real time, from challenges to communication: an almost two-year retrospective.

11:30 - 12:00 Break

12:00 - 12:45 Nicolas Bacaer (IRD): De nouveaux livres sur la modélisation mathématique des épidémies.