## Modeling the propagation of Covid-19

 $\underline{\text{http://cams.ehess.fr/workshop-modeling-the-propagation-of-covid-19/}}$ 

## Monday 18

1	Opening session: Bruno Karsenti, vice-Président of the EHESS, Antoine Petit, Chairman & CEO of the CNRS	
10:30- 11:45am	Gabriel Leung (Hong-Kong)	Research insights about COVID-19 from Hong Kong
11:45am- 1pm	Gilles Pialoux (Tenon Hospital, Paris)	After the first wave of the COVID-19 crisis can the health care worker still believe in modeling? – Talk in French, slides in English
	Quentin Griette and Pierre Magal (Institut de Mathématiques de Bordeaux)	Understanding unreported cases in the COVID-19 epidemic outbreak and the importance of major public health interventions
3:45- 5:00pm	, , , , , , , , , , , , , , , , , , , ,	Intensive Care Unit Bed Availability Monitoring and Modelling during the COVID-19 Epidemic in the Grand Est region of France
break		
5:15- 6:30pm	Patrice Bourdelais (history, EHESS)	Mapping the course of an epidemic: the example of two cholera epidemics in France (1832 and 1854)

## Tuesday 19

10:00-	Opening session: Pascal Auscher, Scientific Director of the National Institute for Mathematical Sciences and their Interaction, CNRS, and the Scientific Director of the National Institute for Humanities and Social Sciences, CNRS	
10:30- 11:45am	Marino Gatto (ecology, Politecnico di Milano)	The routes of COVID-19 in Italy: past and future scenarios
11:45am- 1pm	Jean-Michel Roquejoffre (Institut de mathématiques, Univ. de Toulouse)	Propagation of epidemics on lines of fast diffusion
2:30- 3:45pm	Lionel Roques (BioSP, INRAE)	Estimating the infection fatality ratio from COVID-19 and the impact of the lockdown in France
3:45- 5:00pm	Luca Ferretti (Large data Institute & Bio-statistics, Oxford)	Epidemic control of COVID-19 through rapid contact tracing: the case for a mobile app-based solution
break		
5:15- 6:30pm	Laura Di Domenico & Vittoria Colizza (EPIcx lab, INSERM, Sorbonne Université)	Expected impact of lockdown on COVID-19 epidemic in Île-de-France and possible exit strategies

## Wednesday 20

10:00- 10:30am	Opening session: Marie Gaille (senior research in philosophy, SPHERE, CNRS-University of Paris)	To be tracking or not tracking, that is the question or not?
10:30- 11:45am	Marc Lavielle (Inria, CMAP Ecole Polytechnique)	Modelling the COVID 19 pandemic requires a model but also data!
11:45am- 1pm	Samuel Nordmann (University of Tel-Aviv)	Activity/susceptibility systems: a general class of models for the propagation of epidemics, social unrest and other collective behaviors
2:30- 3:00pm	Lenka Zdeborova (CEA Saclay), Florent Krzakala, Marc Mézard (ENS Paris) <i>et al</i> [short talk]	Risk estimation from contact tracing data
3:00- 4:15pm	Lulla Opatowski (Univ. de Versailles Saint Quentin / Institut Pasteur / Inserm)	Modelling sars-cov2 transmission in the French community and hospitals
4:15- 5:00pm	Giovanni Sebastiani (Statistics, IAC-CNR and La Sapienza, Rome & Univ. of Tromsø)	Classical and Bayesian models and methods for Covid-19
break		
5:15- 5:45pm	Andrea Pugliese (University of Trento) [short talk]	Inferring time course of infections from proxy aggregated data: problems and perspectives
5:45- 6:30pm	General discussion	