

Quantitative viral dynamics

Master 2 IMaLiS, Ecole Normale Supérieure, 2024-2025; 12-15 November 2024

Organiser : François Blanquart francois.blanquart@college-de-france.fr

For admin & practical matters please contact secfib-M2@bio.ens.psl.eu

Schedule: 9:30am to 12:30 am, 14pm to 17pm

Salle: **321** (46 rue d'Ulm, 3rd floor)

Tuesday, November 12th

9:30-12:30

François Blanquart, **Modelling within-host dynamics of human viruses.**

11:30 Jérémie Guedj: Example of research in mathematical modelling of within-host dynamics.

14-17

Mattia della Vecchia, digital laboratory on modelling within-host dynamics. Inferring the key parameters of HIV infection from within-host longitudinal viral load data.

Wednesday, November 13th

9:30-12:30

Jérémy Seurat, **Phage ecology and phage therapy.**

11:30 Clara Douadi, Bacteriophage translocation across the intestinal barrier in health and Crohn's disease.

14-17

Jérémy Seurat, Mattia della Vecchia: digital laboratory: mixed models to infer phage dynamics

Thursday, November 14th

9:30-12:30

François Blanquart: **Modelling outbreak dynamics (1).**

14-17 is free

Friday, November 15th

9:30-12:30

François Blanquart. **Modelling outbreak dynamics (2).** Brief introduction to **phylodynamics** of infectious diseases.

11:30 Sebastian Duchêne: Example of research in phylodynamics

14-17

Mattia della Vecchia: digital laboratory on outbreak dynamics.