

James Gleeson (UL)

Differential-equations modelling and Covid-19

In this talk I will review SEIR-type models such as those used within the Irish Epidemiological Modelling Advisory Group (IEMAG) to model Covid-19 at population level. The usefulness of dynamical-systems approaches in guiding models will be shown with examples, and I will then focus on the challenge of calibrating such models to data and quantifying uncertainty. The results I will show are produced in collaboration with Brendan Murphy (UCD), Joseph O'Brien (UL) and David O'Sullivan (UL), with helpful advice from colleagues in IEMAG.