

Bethe Colloquium

Frank Krauss

Durham University

Introducing JUNE an open-source epidemiological simulation

We constructed a detailed digital twin of the UK population, with supreme social and geographical granularity, representing 55 million residents in England and Wales and tracing their daily movements and activities. The spread of the infection is propagated through the virtual population through simulated social contacts. The progress of the disease in infected individuals and their trajectory through the healthcare system is modelled based on public health data. We resolve the spatio-temporal development of the disease spread through the population in great detail and are able to find non-trivial correlations of infection and fatality rares with a variety of societal factors. Our model has been proven in the midst of the current crisis and is currently being used by NHS-England's COVID-19 response team to inform their strategic and operational planning.



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Zoom meeting

For the link please contact theory@physik.uni-bonn.de.

