

## 2021

# YILIN KONFERANSI

COMPUTATIONAL EPIDEMIOLOGY AT THE TIME OF COVID-19

### ALESSANDRO VESPIGNANI



10 ARALIK CUMA

20.00





### COMPUTATIONAL EPIDEMIOLOGY AT THE TIME OF COVID-19

The data science revolution is finally enabling the development of large-scale data-driven models that provide real- or near-real-time forecasts and risk analysis for infectious disease threats. These models also provide rationales and quantitative analysis to support policy-making decisions and intervention plans. At the same time, the non-incremental advance of the field presents a broad range of challenges: algorithmic (multiscale constitutive equations, scalability, parallelization), real-time integration of novel digital data streams (social networks, participatory platform, human mobility etc.). Alessandro Vespigiani will review and discuss recent results and challenges in the area, and focus on ongoing work aimed at responding to the COVID-19 pandemic.

#### **ALESSANDRO VESPIGNANI**

Alessandro Vespignani is the Director of the Network Science Institute and Sternberg Family Distinguished University Professor at Northeastern University, Boston. He is a professor with interdisciplinary appointments in the College of Computer and Information Science, College of Science, and the Bouvé College of Health Sciences. Dr. Vespignani's work focuses on statistical and numerical simulation methods to model spreading phenomena, including the realistic and data-driven computational modeling of biological, social, and technological systems. For several years his work has focused on the spreading of infectious diseases, working closely with the CDC and the WHO.