



Friday, 26 November 2021 | 1600 – 1700 IST

Venue: Ramanujan Auditorium, IMSc, Chennai

Livestream:  [matsciencechannel](https://www.youtube.com/channel/UCmatsciencechannel)

**Playing games during a pandemic:** Mathematical modeling for public health

Sitabhra Sinha (IMSc)



Using the language of game theory, we explore how individual responses to public health measures for containing pandemics constrain their effectiveness. Even when the benefits of such measures - which may involve vaccination or non-pharmaceutical interventions such as quarantining or mask-wearing - may appear obvious, individuals upon weighing the risk of infection against the cost(s) of adopting such measures, may decide not to conform. Not surprisingly, the course of the epidemic will itself depend on the collective aggregate of such individual decisions, with less-than-complete adherence bringing about multiple resurgences of the epidemic.

The Institute of Mathematical Sciences  
IV Cross Road, CIT Campus, Taramani, Chennai – 600113  
[www.imsc.res.in](http://www.imsc.res.in)



@IMScChennai

