

ICTS MONTHLY COLLOQUIUM

# Moments in Positivity: Metric Geometry, Covariance Estimation, Novel Graph Invariant

I will discuss the connections of matrix positivity and its preservers to multiple sub-fields of mathematics: analysis, metric geometry, combinatorics, and also downstream applications. This includes classical results by Schur, Rudin, Loewner, Karlin, and their students: FitzGerald, Horn, Pinkus, and Schoenberg. I will conclude with an application to combinatorics.

## Apoorva Khare

Apoorva Khare is Associate Professor in Mathematics at the Indian Institute of Science and member of the Probability and Analysis Research Group. He received a B.Stat (Hons.) from the Indian Statistical Institute, Kolkata in 2000 and then a MS and PhD in Mathematics from the University of Chicago in 2006. Prior to joining IISc in 2017, he held positions at University of California-Riverside, Yale and Stanford Universities. He has a wide range of interests and has been recognised for his work in the areas of analysis, combinatorics and representation theory. He is the recipient of a Ramanujan and Swarnajayanti Fellowship.

3.30 pm, 28 September 2020

ONLINE COLLOQUIUM

Use this link to join the Zoom meeting -  
<https://bit.ly/ictsMCsep20>

Meeting ID: 941 4774 5675

Passcode : 801121