PIPGES · WEBINARS

OCT · 22
2021

02:00 PM

(GMT-03:00) Brasilia Standard Time - Sao Paulo

The video call link will be available at:

https://tiny.one/gsilva

Interinstitutional Graduate Program in Statistics (PIPGES) of Federal University of São Carlos with University of São Paulo promotes seminars groups (temporarily webinars, due to pandemic issues) of researches involving Probability, Statistics, Machine Learning etc. Our interest, among other things, is to stimulate the sharing of knowledge, as well as the connection between members of the program and researchers in other institutions.

Organizer
Michel H. Montoril, Department of Statistics,
Federal University of São Carlos.

UFSCar

RANDOM MATRICES AND RANDOM GROWTH PROCESSES

Random matrix theory has proven to be a fertile ground for diverse aspects in basic science. From its emergence in nuclear physics, to the development of outstanding mathematical theory surrounding it and a vast array of applications that recently emerged in data science, engineering and mathematical physics, it surely has a flavour for anyone's taste.

In this talk we will survey various classical aspects of random matrix theory, as they historically emerged. A major part of the talk will be focused on explaining recent interplays with some random growth processes, where we also plan to discuss some of the recent contributions of the author with collaborators in connection with the KPZ Universality Class.

The talk is partly based on recent and ongoing works of the author with Jinho Baik (University of Michigan), Promit Ghosal (MIT), Zhipeng Liu (University of Kansas) and Andrei Prokhorov (University of Michigan).

SPEAKER
Guilherme Silva · ICMC-USP

BIO
Since 2020 Guilherme Silva is a FAPESP Young Investigator fellow, working at the Instituto de Ciências Matemáticas e de Computação - Universidade de São Paulo (ICMC - USP), in Brazil. Before that, from 2016 to 2019 he was a Postdoctoral Assistant Professor at the University of Michigan, where he was also part of the Integrable Probability Focused Research Group (FRG). He got his Ph.D. in Mathematics at the KU Leuven (Belgium) in 2016, under the supervision of Arno Kuijlaars. He has also held visiting researcher positions at the MSRI-Berkeley, Fudan University and ICMAT-Madrid.

His earlier work was focused on potential theory and random matrix theory. More recently, he has been working on various mathematical aspects surrounding distributions that arise in $1+1$ dimensional random growth models.

ICMC · USP