

INTheory on-line Seminar Series 07



PMI 物理,机器与智能

Optimization with input from Spin Glasses and RMT



Speaker: Yan Fyodorov (King's College London)

Host: Haiping Huang

Abstract:

I will discuss two random optimization problems of the least-square type on a highdimensional sphere, where the methods borrowed from statistical mechanics and random matrix theory (RMT) prove to be useful. The presentation will be based on two papers: Y. V. Fyodorov, J. Stat. Phys. 175: 789 (2019) and Y. V. Fyodorov and R. Tublin, arXiv: 2112.13446.

About speaker:

Yan Fyodorov received a PhD in Theoretical & Mathematical Physics from the Petersburg Nuclear Physics Institute in 1988. He held post-doctoral positions at the University of Duisburg-Essen and the Weizmann Institute of Science, and Professorships at Brunel University, University of Nottingham, and Queen Mary University. He held significant visiting positions at Cologne University as Bessel Research Awardee (2006/7); the Isaac Newton Institute, Cambridge, as Leverhulme Research Fellow (2008); as well at École normale supérieure, Paris (2010); Instut Henri Poincaré, Paris (2012); and Institute for Advanced Studies, Princeton (2013). He joined the Mathematics Department at King's in June 2016. His research interests cover theory of random matrices and its application, e.g., spin glass, topology of random landscapes etc.

Time: 17:00-18:30, Apr 14, 2022 Voovmeeting/Tecentmeeting ID: 930 144 321

