

BRIN MATHEMATICS RESEARCH CENTER

# Statistical Theory of Deep Neural Network Models

November 7 - 9, 2024

### About the Workshop

As deep learning has achieved breakthrough performance in a variety of application domains, a significant effort has been made to understand theoretical foundations of Deep Neural Network (DNN) models. Statisticians have devoted to understanding for example why deep neural networks models outperform classic nonparametric estimates and providing theoretical underpinning of DNN models from the lens of statistical theory. This workshop aims to bring together researchers in the field to discuss the pecent progress in statistical theory and foundations of DNN models, and chart possible future research directions.

## **Speakers**

Arash Amini, UCLA Peter Bartlett, Berkeley Ismael Castillo, Sorbonne Minwoo Chae, Postech David Dunson, Duke Jian Huang, PolyU Yongdai Kim, SNU Sophie Langer, UT Wenjing Liao, Georgia Tech Lu Lu, Yale Rong Tang, HKUST Matus Telgarsky, NYU Jane-Ling Wang, UC Davis Yixin Wang, Michigan Yuting Wei, U Penn Tong Zhang, UIUC Yiqiao Zhong, Wisconsin



Lizhen Lin, Maryland Vince Lyzinski, Maryland

#### Yun Yang, Maryland





CSIC Building, 4th Floor 8169 Paint Branch Drive University of Maryland College Park, MD 20742



#### DEPARTMENT OF MATHEMATICS