



# THE UNIVERSITY OF CHICAGO

## COMPUTATIONAL AND APPLIED MATHEMATICS STUDENT SEMINAR

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YUMING CHEN

Committee on Computational and Applied Mathematics  
University of Chicago

Physics-informed machine learning and uncertainty quantification

Tuesday, December 1, 2020, 3:00 PM (CDT)

Zoom Meeting ID: 972 4989 6395

Password: 673056

### ABSTRACT

Physics-informed Neural Network (PINN) has received increasing attention in recent years, as a flexible numerical solver for differential equations. I'll talk about some recent advances in PINN, including its generalization and optimization issues. I will also discuss how PINN could potentially facilitate uncertainty quantification, in both forward/inverse problems.