

NUMERICAL ANALYSIS AND SCIENTIFIC COMPUTING  
SEMINAR

*Randomization in Numerical Linear Algebra (RandNLA)*

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**Abstract:** The introduction of randomization in the design and analysis of algorithms for matrix computations (such as matrix multiplication, regression, the Singular Value Decomposition (SVD), etc.) over the past 20 years provided a new paradigm and a complementary perspective to traditional numerical linear algebra approaches. These novel approaches were motivated by technological developments in many areas of scientific research that permit the automatic generation of Big Data, which are often modeled as matrices. In this talk, we will primarily focus on how such approaches can be used to design fast solvers for least-squares problems, ridge-regression problems, and even linear programs.

Friday, April 9, 2021, 1:30 pm  
<https://emory.zoom.us/j/95900585494>

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