



THE UNIVERSITY OF CHICAGO

COMPUTATIONAL AND APPLIED MATHEMATICS COLLOQUIUM

KE YE

Academy of Mathematics and Systems Science
Chinese Academy of Sciences

Tensor Ranks with Applications to Complexity Theory

THURSDAY, October 11, 2018, at 4:00 PM
Jones 226, 5747 South Ellis Avenue

ABSTRACT

This talk consists of two parts. In the first part, I will review various notions of tensor ranks and present some of our new results on these ranks. In the second part, I will first discuss the connection between tensor ranks and the computational complexity theory. In particular, I will concentrate on the complexity of the matrix-vector/matrix-matrix multiplication. If time permits, I will exhibit some numerical algorithms for small size matrix multiplication obtained by this method.



Organizers:

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CAM Colloquium URL: <https://cam.uchicago.edu/seminars/index.shtml>.

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