UNIVERSITY OF RHODE ISLAND
Department of Mathematics

Applied Mathematics and
Scientific Computing Seminar

Location: Lippitt Hall 201

Time: Thursday, November 19, 2015, 1:00pm

Leja ordering, Laurent polynomials and fast algorithms for structured matrices

by David Miller

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Abstract: The Vandermonde matrix and Cauchy matrix are classical and are encountered in polynomial and rational interpolation computation respectively. The structure of these matrices lead to fast inversion algorithms and system solvers. We look to extend these properties to other structured matrices, including Cauchy-Vandermonde matrices and Laurent-polynomial systems.