TEMPLE UNIVERSITY
Department of Mathematics

Applied Mathematics and Scientific Computing Seminar

Room 617 Wachman Hall

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Computing the Inverse of a Multivariable Toeplitz Matrix

by Selcuk Koyuncu

Drexel University

Abstract.

Gohberg and Semencul proved that, under certain nonsingularity conditions, the inverse of a Toeplitz matrix is based on the entries in the first and last columns of the inverse. In this paper, similar formulas are studied for Multivariable Toeplitz matrices. Some numerical experiments are also presented.

(Joint work with Hugo J. Woerdeman)