

## CLAREMONT CENTER for MATHEMATICAL SCIENCES

## CCMS COLLOQUIUM

EIGENVALUES OF FINITE TOEPLITZ MATRICES

by

## Estelle Basor

**American Institute of Mathematics** 

**Abstract**: Any square matrix with constant values along each diagonal is called a Toeplitz matrix. Toeplitz matrices arise in many areas of mathematics including analysis, probability theory, and mathematical physics. The goal of the talk will be to describe the limiting behavior of the eigenvalues as the size of the matrix grows. Many examples will be presented and some open conjectures. Only a knowledge of basic linear algebra will be assumed.

About the speaker: Estelle Basor is currently the Deputy Director of the American Institute of Mathematics. She received her PhD from the University of California at Santa Cruz and recently retired from California Polytechnic State University in San Luis Obispo, where she was a Professor of Mathematics. She serves on the Editorial Board of "Random Matrices: Theory and Applications", received multiple NSF grants, and has held visiting positions at MSRI (Berkeley), Isaac Newton Institute of Mathematical Sciences (Cambridge, England), UC Santa Cruz, and Bryn Mawr College. Her research interests are in the areas of operator theory and random matrix theory.

## Wednesday, April 25, 2012, at 4:15pm

Freeburg Forum (Kravis Center, LC 62), Claremont McKenna College

Refreshments at 3:45 p.m. in Freeburg Forum Courtyard & wine and cheese after the talk in CMC Math Commons Room (Adams 208)

The dinner will be hosted by Prof. Stephan Garcia.

Please contact Prof. Garcia if you are interested in attending the dinner.