

Tuesday,
October 30, 2012

5:00-6:00 PM

General
Academic
Building,
Room 104

A pre-lecture reception with cookies, coffee and tea will be held at 4:30 PM in the General Academic Building, Room 472 .

The *RTG in Logic & Dynamics* is a research training group supported by the National Science Foundation and the University of North Texas.

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ERIKO HIRONAKA

FLORIDA STATE UNIVERSITY



LEHMER'S NUMBER AND THE GOLDEN MEAN

Polynomials are simple to define objects that are both a useful tool for solving mathematical problems and spawn interesting research in their own right. This talk will be a brief tour through some of the interconnected ideas in the areas of number theory, geometry, and dynamical systems as seen from the point of view of properties of polynomials. Along the way, we will uncover a new relation between two well-known numbers: the golden mean and Lehmer's number.

Eko Hironaka was born in New Jersey and grew up in Massachusetts. She got her PhD at Brown University in 1990 with a thesis entitled Abelian Coverings of the Complex Projective Plane Branched along Configurations of Real Lines. The first 7 years following her PhD were spent at Stanford University; the Max-Planck-Institut for Mathematics in Bonn, Germany; the Institute des Hautes Etudes near Paris, France; the Mathematical Sciences Research Institute in Berkeley, CA, and the University of Toronto. Despite being very fond of snow, she eventually landed at Florida State University, where she was recently promoted to full professor. Most of her time away from mathematics is spent with her two children—12-year-old, daughter, Ella, and 9-year-old son, Alex—and her husband, Mark, a jazz violinist and computer programmer. Eko also enjoys traveling, hiking, photography and reading.