

HARVARD UNIVERSITY

Program for Evolutionary Dynamics

Research Opportunities in Mathematical Evolution (R.O.M.E.)

Date: Wednesday, March 9, 2005

Time: 4:00 pm - 6:00 pm

Location: Program for Evolutionary Dynamics
One Brattle Street
Ste. 6

Evolution provides a mathematical language for expressing how a wide variety of complex systems change over time. Research Opportunities in the Mathematics of Evolution, or ROME, is a new initiative hosted by the Program in Evolutionary Dynamics which allows undergraduates and starting graduate students to get involved in cutting-edge research on evolutionary phenomena and the mathematical principles that underly them.

This year's colloquium will feature four short presentations about projects presently underway at ROME. Although they cut across many fields, these projects are united by the principles of mathematical evolution. Topics discussed will include random walks, combinatorial chemistry, linguistics, and Google-based algorithms for proteomics. The speakers are all undergraduates and early graduate students who participated in this, the first year of ROME.

A Roman style feast will follow.

For more information, please contact Erez Liberman, elieberm@fas.harvard.edu, or Doreen Barako, PED Program Coordinator, doreen_barako@harvard.edu.

Speakers:

Gabriel Carroll

Senior, Department of Mathematics
"Random Walks, Spanning Trees,
and Neutral Evolution on Graphs"

Joseph Jackson

Senior, Department of Computer Science
"Irregular Verbs"

Rita Loiotile

Senior, Department of Mathematics
"Variable Shuffling in Combinatorial Chemistry"

Kaveri Rajaraman

G1, Department of Molecular Biology
"Google for Genomes"

introductory remarks by:

Martin Nowak

Professor of Mathematics and of Biology
Harvard University

Erez Liberman

Department of Applied Mathematics
Graduate Coordinator, ROME