

A FOCUS on MATHEMATICS COLLOQUIUM

Mathematics at Work: Making a Research Experience Accessible to All Students

Presented by:

Art Heinricher

**Professor of Mathematics
Worcester Polytechnic Institute**

Date:

March 2, 2005

Place:

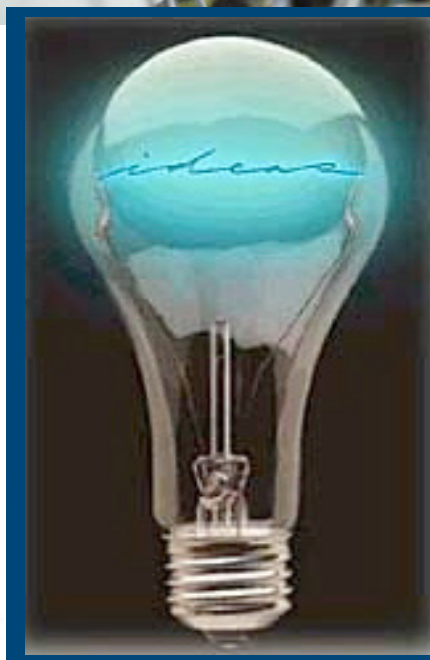
BOSTON UNIVERSITY

School of Management

ROOM 212

Time:

4:30-5:30 PM



The core of the presentation will be examples of mathematical research projects completed by WPI students for business and industry. These provide the raw material for problems that are engaging and can be accessible to all students.

Examples:

- Massachusetts is currently redesigning its system for managing the high-risk automobile insurance business in the state. Is there a fair way to assign "bad" drivers to insurance companies?
- How can the automatic diagnostic system in a gas station identify problems with the pumps when 15% of new cars are designed to set off false alarms?

In addition to the specific examples, I will describe methods that have been useful in helping students (and teachers) survive the "creative floundering" stage that comes at the beginning of every research project.

Very few of our students will go on to do graduate work in mathematics. All of our students can and should have the experience of using mathematics and mathematical thinking outside of the safety of the mathematics textbook.



Reception to follow in Room 326 from 5:30 - 6:30 PM



Teacher Registration & RSVP by February 28, 2005

Please let us know if you plan to attend!

Contact Karina Dymina: karina@focusonmath.org

For more info & directions please visit: www.focusonmath.org



Focus on Mathematics is a unique partnership of mathematicians and educators from Boston University, Education Development Center, Inc., Worcester Polytechnic Institute, UMass Lowell, Lesley University, and five Greater Boston school districts: Arlington, Chelsea, Lawrence, Waltham, and Watertown.

