James Madison University SUMS Conference 2008

The 2008 Shenandoah Undergraduate Mathematics and Statistics Conference is a one-day undergraduate research conference featuring:

- undergraduate contributed talks
- ▶ student poster sessions
- two invited addresses
- academic and industry panels
- ► an AMC workshop

Students who have completed original research in mathematics or statistics while an undergraduate are invited to contribute 15 minute talks.

Undergraduate and high school students are invited to present research or expository posters on any mathematical topic.

Registration and abstract submission deadline is October 3, 2008. Modest travel support is available on a rolling application basis.

Support for the SUMS Conference is provided by NSF grant DMS-0536991 through the MAA RUMC program, and by James Madison University.





Opening Speaker: Robin Wilson, Cal Poly Pomona *Knots, Surfaces, and 3-Manifolds*

In this talk I will give an introduction to knot theory and its connections with 3-manifold topology, through the study of surfaces in 3-manifolds and knot exteriors. I will also discuss some recent research about bridge surfaces in knot complements.

Saturday October 18 2008



Closing Speaker: Michael Mossinghoff, Davidson College

Sufferin' Succotash! A Problem of Sylvester's

Given a finite number of points placed in the plane so that they do not all lie on the same line, must there exist a line connecting exactly two of these points? We'll discuss some novel methods of investigating this century-old problem, including some contributions made by undergraduates.

www.math.jmu.edu/SUMS Dr. E. T. Brown Dr. Laura Taalman