



Department of Mathematics
Celebration of Women in Mathematics*

Jean E. Rubin Memorial Lecture

Thursday, November 19, 2009

4:30 p.m.

BRNG B268

Refreshments will be served prior to the talk at 4 p.m. in the Math Library Lounge (3rd floor MATH).

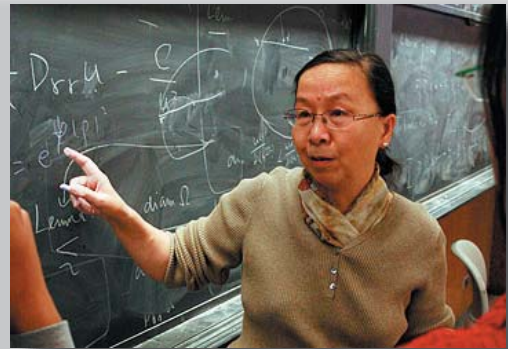
Speaker:

Sun-Yung Alice Chang

Professor of Mathematics

Chair, Department of Mathematics

Princeton University



Professor Chang is Chair of the Mathematics Department at Princeton University. Throughout her career, she has received numerous awards for her mathematical achievements and service to the community. She was the recipient of an Alfred P. Sloan Fellowship and a Guggenheim Foundation Fellowship, and she is a member of the American Academy of Arts and Sciences and the National Academy of Sciences. She served as Vice President of the American Mathematical Society (AMS) from 1989 to 1991, and in 1995, she received the AMS Ruth Lyttle Satter Prize for outstanding contributions to mathematics research by a woman. In 2002, she was an invited plenary speaker at the International Congress of Mathematicians (ICM), the most prestigious invitation a mathematician can aspire to have in his or her career. Prof. Chang has also been active in many efforts to increase the representation of women in mathematics.

Q-curvature in Conformal Geometry

Abstract

The notion of Q-curvature was introduced by Paneitz-Branson in the early 1980s as a direct generalization of the Gaussian curvature on a compact surface. The notion was originally defined only for manifolds of dimension four. In recent years, there have been intensive efforts to study the subject mainly due to its conformal invariant property and its connection to some geometric invariants in the asymptotic hyperbolic, conformally compact Einstein manifolds. In this talk, I will give a brief survey of the subject with emphasis on applications to problems in conformal geometry.



Jean E. Rubin was Professor of Mathematics at Purdue University from 1967 until her death in 2002. She received a B.S. from Queen's College in New York City in 1948, an M.A. from Columbia in 1949, and a Ph.D. from Stanford in 1955. She taught at Oregon and Michigan State before coming to Purdue.

Professor Rubin was the author of more than 40 papers and five books in set theory and questions related to the axiom of choice.

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**Additional information is available at www.math.purdue.edu.*