

Alfred Brauer Lectures

Past Brauer Lectures

Alex Eskin, Department of Mathematics, University of Chicago (2010)

"Billiards in rational polygons and dynamics on Teichmüller space, volumes of fundamental domains and the Siegel-Veech constants, and the Teichmüller geodesic flow: Lyapunov exponents and periodic trajectories.", March 15-17, 2010

Claire Voisin, Institut de Mathématiques de Jussieu (2009)

"Curves and their Jacobians; from canonical syzygies to Hodge theory and algebraic cycles of Jacobians", February 16, 18, and 19, 2009

Charles L. Fefferman, Herbert Jones University Professor of Mathematics, Princeton University (2008)

"Interpolation and Extension of Functions", April 28-30, 2008

Percy Deift, Department of Mathematics, Courant Institute (2007)

"Universality for Mathematical and Physical Systems", May 1-3, 2007

Shing-Tung Yau, Department of Mathematics, Harvard University (2006)

"Analysis on complex manifolds, Kähler-Einstein metrics, and connections with superstring theory", January 25-27, 2006

Jeff Cheeger, Department of Mathematics, Courant Institute (2005)

"Degeneration of Einstein Metrics in Dimension 4", April 18-20, 2005

Andrew Majda, Courant Institute (2004)

"New Perspectives on Equilibrium Statistical Mechanics and Predicting Jupiter's Red Spot", March 29, 2004

"Information Theory and Predictability", March 30

"Systematic Strategies for Stochastic Mode Reduction in Climate Modeling"

Janos Kollar, Princeton University (2003)

"The Simplest Algebraic Varieties", March 24-26, 2003

Peter Sarnak, Princeton; Courant Institute of Mathematical Sciences (2002)

"L-Functions and Equidistribution", April 22, 2002

Yakov Eliashberg, Stanford University (2001)

"Holomorphic curves and invariants of symplectic and contact manifolds", "Symplectic field theory: algebraic structures associated to moduli spaces of holomorphic curves, I and II", April 23, 2001

Bertram Kostant, Massachusetts Institute of Technology (2000)

"On Laguerre polynomials, Bessel functions, Hankel transform and a series in the unitary dual of the simply connected covering group of $SL(2, \mathbb{R})$ ", April 17, 2000

Nigel Hitchin, Oxford University (1999)

"Real and Complex Geometry", March 15, 1999

Andrew Wiles, Princeton University (1998)

"Elliptic curves and Fermat's Last Theorem I and II", April 22, 1998

Ian G. Macdonald, University of London (1997)

"Constant term identities, orthogonal polynomials and affine Hecke algebras", April 7, 8, and 10, 1997

Friedrich Hirzebruch, Max Planck Institut fuer Mathematik, Bonn (1996)

"The old story of knots and singularities", March 11 and 12, 1996

"Hypergeometric functions and algebraic surfaces", March 14, 1996

Clifford Taubes, Harvard University (1995)

"The Seiberg-Witten invariants and new developments in 4-dimensional topology",
March 14, 15, and 16, 1995

John Conway, Princeton University (1994)

"What are all the best ways to pack spheres?", April 18, 1994

"Some interesting groups", April 19, 1994

Joe Harris, Harvard University (1993)

"Positivity and negativity in arithmetic and geometry", April 19–20, 1993

Yuri I. Manin, University of Moscow and Columbia University (1992)

"Diophantine equations with many solutions", March 30–31, 1992

**Grigori A. Margulis, Institute for Problems in Information Transmission, Moscow
and The Institute for Advanced Study (1991)**

"Subgroup actions on homogeneous spaces and number theory", March 20–21, 1991

Persi Diaconis, Harvard University (1990)

"The mathematics of mixing things up", March 26, 1990 "Geometric bounds for
eigenvalues: contributions to Brauer's work", March 27, 1990

Benedict Gross, Harvard University (1989)

"Representations of $GL(2)$ and number theory", April 17–18, 1989

Armand Borel, The Institute for Advanced Study (1988)

"Indefinite quadratic forms and discrete subgroups of Lie groups", April 11, 1988

"Covolumes of discrete subgroups of Lie groups", April 12, 1988

Barry Mazur, Harvard University (1987)

"Galois representations", May 4, 1987

"Galois representations, II", May 5, 1987

Richard Stanley, Massachusetts Institute of Technology (1986)

"Unimodal sequences in algebra and combinatorics", April 14, 1986

"Counting the faces of polytopes and polyhedral complexes", April 15, 1986

Daniel Gorenstein, Rutgers University (1985)

"The classification of the finite simple groups", April 22, 1985

"Future directions in finite group theory", April 23, 1985