Beilinson and Hofer Share Ostrowski Prize

Alexander Beilinson

Helmut Hofer

ALEXANDER BEILINSON of the University of Chicago and HELMUT HOFER of the Courant Institute shared the 1999 Ostrowski Prize. The prize carries a monetary award of 150,000 Swiss francs (approximately $87,000) and two fellowships each of 30,000 Swiss francs.

Beilinson received the Ostrowski Prize for achievements in the areas of representation theory, arithmetic geometry, and modern mathematical physics. His proof with J. Bernstein of the Jantzen conjectures for reductive Lie groups involved the earlier development of $\mathcal{D}$-modules and perverse sheaves in which he also played a key role. His conjectures and computations in K-theory continue to be very influential, as for example in his motivic treatment of D. Zagier's polylogarithm conjectures in joint work with P. Deligne. And Beilinson's total rebuilding of the theory of vertex operator algebras with V. Drinfeld contributes to the understanding of two-dimensional conformal field theory and string theory and has furthermore led to progress in the geometric Langlands program.

Hofer received the Ostrowski Prize for several contributions to contact and symplectic geometry. His proof of the Weinstein conjecture for a wide and significant class of 3-manifolds was not only a breakthrough but also set in motion an extensive research program carried through by him in collaboration with Y. Eliashberg, K. Wysocki, E. Zehnder, and others. Landmarks include the characterization of the 3-ball and the 3-sphere in dynamical terms, as well as a theorem about closed characteristics on strictly convex hypersurfaces in symplectic 4-space.

The Ostrowski Foundation was created by Alexander Ostrowski, for many years a professor at the University of Basel. He left his entire estate to the foundation and stipulated that the income should provide a prize for outstanding recent achievements in pure mathematics and the foundations of numerical mathematics. The prize is awarded every other year. Previous recipients of the Ostrowski Prize are Louis de Branges, Jean Bourgain, Miklós Laczkovich, Marina Ratner, Andrew Wiles, Yuri Nesterenko, and Gilles Pisier. The prize jury consists of representatives from the universities of Basel, Jerusalem, and Waterloo, and from the academies of Denmark and the Netherlands.

The 1999 prize was awarded on June 9, 2000, at the University of Basel.

—From an Ostrowski Foundation news release