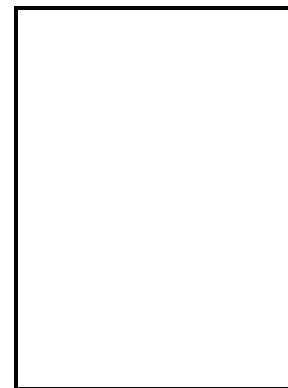The Jeffery-Williams Lectureship was inaugurated in 1968 to recognize mathematicians who have made outstanding contributions to mathematical research and is presented in conjunction with the Canadian Mathematical Society's Summer Meeting.

La conférence Jeffery-Williams, créée en 1968, rend hommage aux mathématiciens qui se sont distingués par leur apport exceptionnel à la recherche en mathématiques. Elle est présentée dans le cadre de la réunion d'été de la Société mathématique du Canada.

RECIPIENTS / RÉCIPIENDAIRES

1968	I. Kaplansky
1969	R. Pyke
1970	W.A.J. Luxemburg
1971	W.T. Tutte
1972	P.J. Davis
1973	H.S.M. Coxeter
1974	H.J. Zassenhaus
1975	N.S. Mendelsohn
1976	M. Wyman
1977	G. Duff
1978	G. Gratzer
1979	I. Halperin
1980	R.P. Langlands
1981	J.E. Marsden
1982	J. Lipman
1983	R.H. Bott
1984	C.S. Morawetz
1985	L. Siebenmann
1986	C. Herz
1987	L. Nirenberg
1988	J. Lambek
1989	E.C. Milner
1990	R. Steinberg
1991	P. Lancaster
1992	I. Sigal
1993	J.G. Arthur
1994	Donald Dawson
1995	Robert V. Moody
1996	Mark Goresky

The 29th Jeffery-Williams Prize Lecture
Le 29ème Prix de conférence Jeffery-Williams

Mark Goresky
Institute for Advanced Study
Northeastern University

1996 CMS Summer Meeting
Réunion d'été 1996 de la SMC
Calgary, Alberta
June / juin 1996

Mark Goresky received his Bachelor of Science degree at the University of British Columbia in 1971, and then obtained his Ph.D. under the direction of Robert MacPherson at Brown in 1976. He was a Moore Instructor at MIT in 1976-78, and then as an assistant professor at UBC from 1981 to 1984. He joined the Mathematics Department at Northeastern University in 1984, and has been a full professor there since 1986. In addition to visiting positions at the University of Rome, the École Normale Supérieure (Paris), the University of Wuppertal, IHES (Paris), the University of Chicago and the Max Planck Institute (Bonn), he has spent the last two years at the Institute for Advanced Studies.

Goresky held a Sloan Fellowship in 1981-83, was the Coxeter-James lecturer in 1984, and was elected a Fellow of the Royal Society of Canada in 1986. He has maintained close and creative ties with the Canadian mathematical community, serving on the selection committee for the Royal Society 1990-93 and on the NSERC Grant Selection Committee 1991-94.

Après avoir obtenu un baccalauréat ès sciences de l'Université de la Colombie-Britannique (UBC) en 1971, Mark Goresky a poursuivi ses études à l'Université Brown sous la direction de Robert MacPherson et a obtenu son Ph.D. en 1976. Il a occupé

un poste de "Moore Instructor" au MIT de 1976 à 1978 et de professeur adjoint à UBC de 1981 à 1984. Il s'est joint au département de mathématiques de l'Université Northeastern en 1984 et y occupe un poste de professeur titulaire depuis 1986. M. Goresky a aussi rempli des mandats de professeur invité à l'Université de Rome, à l'École Normale Supérieure (Paris), à l'Université de Wuppertal, à l'IHES (Paris), à l'Université de Chicago et à l'Institut Max Planck (Bonn). Il travaille à l'Institute for Advanced Studies depuis deux ans.

M. Goresky a reçu la bourse Sloan de 1981 à 1983, a prononcé la conférence Coxeter-James en 1984 et a été reçu membre de la Société royale du Canada en 1986. Il entretient des rapports étroits et créatifs avec la communauté mathématique canadienne; il a siégé au comité de sélection de la Société royale de 1990 à 1993 et au comité de sélection des subventions du CRSNG de 1991 à 1994.

Topology and Authur's Lefschetz Formula

Mark Goresky

Ten years ago, J. Arthur discovered a remarkable formula for the Lefschetz number of a Hecke correspondence acting on the cohomology of a locally symmetric space. Some of the ingredients and motivating ideas behind Arthur's formula will be described, as well as the main steps in the (ultimately successful) program to understand and interpret his formula topologically.

CITATION

Goresky's joint work with MacPherson, from the time of his Ph.D. thesis to the present, is one of the more successful collaborations of the century. Intersection homology was introduced in Goresky's thesis, as a method for studying singular spaces. This invariant was extended by Goresky and MacPherson to a homology theory for possibly singular algebraic varieties in arbitrary characteristics in the early 1980's. Calculations based on these invariants have been highly successful and pervasive in algebraic and differential geometry. Most recently, Goresky and MacPherson have achieved a striking breakthrough in the study of Arthur's Lefschetz trace formula for Hecke correspondences.