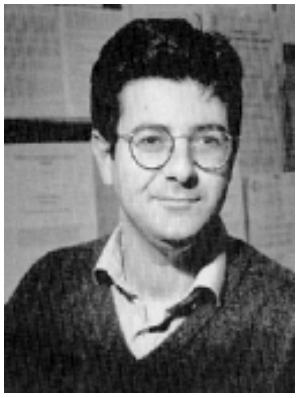

Henri Darmon
McGill University

The 21st Coxeter-James Lecturer
La 21ième conférence Coxeter-James

Citation

Henri Darmon's most important research is concerned with the celebrated Birch and Swinnerton--Dyer conjecture. This conjecture relates the analytic behaviour of the *L*--function of an elliptic curve to algebraic and arithmetic information on the group of rational points of the curve. In a series of joint papers with Bertolini, Darmon formulates a *p*--adic analogue of the Birch and Swinnerton--Dyer conjecture and gives strong theoretical evidence for it by combining the Kolyvagin-Thaine theory of "Euler systems", the Ihara-Ribet theory of congruences between modular forms, and methods of *p*--adic uniformization introduced by Cerednik and Drinfeld.

Les plus importantes recherches de Henri Darmon portent sur la conjecture bien connue de Birch and Swinnerton--Dyer. Cette conjecture fait un lien entre le comportement analytique et la fonction *L* d'une courbe elliptique à l'information algébrique et arithmétique sur le groupe de points rationnels d'une courbe. Dans une série d'articles publiés conjointement avec Bertolini, Darmon formule une analogie *p*--adic de la conjecture Birch and Swinnerton--Dyer et donne des preuves théoriques très crédibles à cet égard en combinant la théorie Kolyvagin-Thaine des "systèmes Euler" la théorie des congruences Ihara-Ribet entre les formes modulaires et les méthodes d'uniformisation *p*--adic lancées par Cerednik et Drinfeld.

Biographical Information

Henri Darmon received his Bachelor's degree from McGill in 1987 and his Ph.D. from Harvard in 1991. His thesis, written under the direction of B.H. Gross, "Refined class number formulas for derivatives of L-series" was awarded the Sloan Doctoral Dissertation Fellowship. Henri was an NSERC post-doctoral fellow at Princeton 1991-92, and remained as an instructor and assistant professor until 1995 when he took a position at McGill. Among his honours, Henri won an Alfred P. Sloan Research Award (1996-98), the G. De B. Robinson Award (1996), and the Prix André Aisenstadt (1997). He was invited to give the prestigious Nachdiplom course of the ETH in Zurich (1998) and is now the Coxeter-James Lecturer of the Canadian Mathematical Society.

The Coxeter-James Lectureship was inaugurated in 1978 to recognize young mathematicians who have made outstanding contributions to mathematical research and is presented in conjunction with the Canadian Mathematical Society's Winter Meeting.

Le prix de conférence Coxeter-James, créé en 1978, rend hommage aux jeunes mathématicien(ne)s qui se sont distingué(e)s par leur apport exceptionnel à la recherche en mathématiques. Elle est présentée dans le cadre de la réunion d'hiver de la Société mathématique du Canada.

Recipients / Récipiendaires

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1982	J. Mallet-Paret	1989	A. Dow	1996	N. Higson
1983	M.D. Choi	1990	N. Ghoussoub	1997	M. Ward
1984	M. Goresky	1991	K. Murty	1998	H. Darmon