



The 31st Jeffery-Williams Prize Lecture *Le 31ème Prix de conférence Jeffery-Williams*

Citation

George Elliott ranks among the very best operator algebraists in the world, a place he shares with two Fields medallists. In addition to being extremely productive, he has been a visionary who has set the subject on a new course. A dramatic conjecture that he made ten years ago suggested a mechanism for classifying a large and important class of C^* -algebras. Moreover he established the prototype theorem stimulating a decade of intense searching for more pieces of this puzzle. Despite some initial scepticism, Elliott's program has had some dramatic successes; and it is now clear that his classification scheme is of fundamental importance and applies to a significant part of the conjectured class.

George A. Elliott
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This work has led not only to isomorphism theorems for C^* -algebras sharing common invariants, but has also led to constructions that show that many C^* -algebras have a special structure that was not imagined a decade ago. In the last few years, Elliott's work has been recognized by many awards, including the CRM/Fields Institute prize, a Connaught Transformative grant from the University of Toronto and a Killam research fellowship. The CMS is pleased to honour him as the winner of this year's Jeffery-Williams prize.

George Elliott est sans doute l'un des meilleurs au monde dans le domaine des opérateurs d'algèbre, une place qu'il partage avec deux médaillés Fields. En plus d'être extrêmement productif, il est considéré comme un visionnaire après avoir dirigé le domaine dans une toute nouvelle direction. Il avait proposé il y a plus de dix ans une conjecture dramatique qui suggérait un mécanisme pour classifier une importante classe d'algèbres C^* . De plus, il établit un théorème prototype qui a stimulé une décennie d'intense recherche pour d'autres morceaux du casse-tête.

Malgré un scepticisme initial, le programme d'Elliott a quand même accompli un succès dramatique; il est maintenant tout à fait clair que son système de classification restera d'une importance fondamentale et trouvera des applications sur une partie significative de la classe suggérée par la conjecture. Cet ouvrage a débouché sur des théorèmes d'isomorphismes d'algèbres C^* ayant des invariants en commun, mais aussi sur des constructions montrant des structures d'algèbres inconnues il y a dix ans. Dans les quelques dernières années, les travaux d'Elliott ont été reconnus par plusieurs prix, en particulier celui des instituts CRM/Fields, une bourse Connaught Transformation de l'Université de Toronto, en plus d'une subvention de recherche Killam.

La SMC est heureuse de lui accorder cette année le prix Jeffery-Williams.

Biographical Information

George Elliott was born in Montreal in 1945. He graduated in Math and Physics from Queen's University in 1965, and completed his doctorate with Israel Halperin in 1969, starting at Queen's and finishing at the University of Toronto. After postdoctoral positions at UBC, Queen's and the Institute for Advanced Study, he took a permanent position at the University of Copenhagen in 1972. He has been Adjunct Professor at the University of Toronto since 1984, Honorary Professor at the University of Wales since 1994, and Senior Distinguished Member of the Fields Institute since 1996. His principal research interest has been operator algebras and their relationship to topology, geometry, dynamical systems and physics. A unifying theme in his work has been K -theory, which has arisen in mathematics in a number of quite different contexts. Elliott was elected a Fellow of the Royal Society of Canada in 1982. He gave an invited lecture at the ICM in Zurich in 1994; he received the CRM/Fields Institute Prize in 1995-96; and has held a Killam Research Fellowship since 1996. He is married to Noriko Yui, a professor of mathematics at Queen's University.

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	1979	I. Halperin	1990	R. Steinberg
1969	R. Pyke	1980	R.P. Langlands	1991	P. Lancaster
1970	W.A.J. Luxemburg	1981	J.E. Marsden	1992	I. Sigal
1971	W.T. Tutte	1982	J. Lipman	1993	J.G. Arthur
1972	P.J. Davis	1983	R.H. Bott	1994	Donald Dawson
1973	H.S.M. Coxeter	1984	C.S. Morawetz	1995	Robert V. Moody
1974	H.J. Zassenhaus	1985	L. Siebenmann	1996	Mark Goresky
1975	N.S. Mendelsohn	1986	C. Herz	1997	Steve Halperin
1976	M. Wyman	1987	L. Nirenberg	1998	George A. Elliott
1977	G. Duff	1988	J. Lambek		
1978	G. Gratzer	1989	E.C. Milner		