2009 Whiteman Prize

JEREMY J. GRAY received the 2009 AMS Albert Leon Whiteman Memorial Prize at the 115th Annual Meeting of the AMS in Washington, DC, in January 2009.

Citation

In awarding the Albert Leon Whiteman Prize to Jeremy J. Gray of the Open University and the University of Warwick, the American Mathematical Society recognizes the value of his many historical works, which have not only shed great light on the history of modern mathematics but also have given an example of the ways in which historical scholarship can contribute to the understanding of mathematics and its philosophy. In addition, Gray's work as an editor, teacher, translator, and organizer of forums for historical work has helped invigorate the study of the history of modern mathematics internationally.

Gray's book *Ideas of Space* (1979) deals with geometrical studies through history, from the Babylonians to Einstein. His fascination with non-Euclidean geometry is evident in much of his work, and in this book he imparts to the reader a sense of the importance of the topic to mathematics and its history.

His book *Linear Differential Equations and Group Theory from Riemann to Poincaré* (1986) is outstanding for the broad spectrum of topics it covers, for the depth in which it covers them, and for the skill with which they are woven together. In addition, the lively style of the narrative passages and of the philosophical discussions makes reading it as entertaining as it is enlightening, although, inevitably, full understanding of the mathematical content demands concentrated work on the part of the reader.

The Hilbert Challenge (2000) is a worthy successor to the earlier works, again weaving together many strands of a story—this time the story of the Hilbert problems—to give the reader an appealing introduction to wide areas of modern mathematics.



Jeremy J. Gray

His publications have taken a great many forms and have covered very wide areas. He has edited and written introductions to works of Janos Bolyai and Julian Coolidge. He has produced, with John Fauvel, a compendious book of readings in the history of mathematics, originally for the Open University but since published by Macmillan. In addition

to his undergraduate textbook on the history of geometry in the nineteenth century, *Worlds Out of Nothing* (2007), he has been co-editor of two volumes of scholarly contributions to the study of history of mathematics, *Episodes in the History of Modern Algebra* (1800–1950) with Karen Parshall, and *The Architecture of Modern Mathematics* with José Ferreirós. Among his many scholarly publications in journals, his translation and annotation of Gauss's Tagebuch in *Expositiones Mathematicae*, volume 4 (1984), is a particularly valuable contribution.

Jeremy Gray's spirited presentations of a wide range of subjects of nineteenth and twentieth century mathematics have earned the respect of his colleagues for the quality of both their historical scholarship and their mathematical accuracy and insight, exactly the traits that the Whiteman Prize is meant to recognize.

Biographical Sketch

Jeremy Gray studied mathematics at the University of Oxford and obtained his Ph.D. at University of Warwick in 1980. He has taught at the Open University since 1974, where he became a professor of the history of mathematics in 2002, and he is an honorary professor at the University of Warwick,

where he lectures on the history of mathematics. In 1996 he was a resident fellow at the Dibner Institute for the History of Science and Technology at the Massachusetts Institute of Technology, and in 1998 he gave an invited lecture at the International Congress of Mathematicians in Berlin. He lives in London with his wife, Sue Laurence, and their daughters, Martha and Eleanor.

Response

I am honoured to receive the Albert Leon Whiteman Memorial Prize of the American Mathematical Society. Mathematicians work in an exciting and important profession. Their research, the quality of their ideas, the applications they develop, and their teaching all make vital contributions to the society around them, and many people from every country in the world can be drawn in to this endeavour. Historians of mathematics have the opportunity to describe this enterprise as it occurred in all its different cultural settings from 6,000 years ago to yesterday, and in this way enrich everyone's appreciation of mathematics. In the last fifty years much has been done by my colleagues around the world in the history of mathematics; their work has been an inspiration to me. When I began to work on the nineteenth century, that century was not so long ago. Now large periods of the twentieth century are open to historical analysis. This will be a particularly rich topic for anyone interested in modern mathematics, and the American Mathematical Society is to be congratulated on its support for the history of our subject. I wish to thank my colleagues at the Open University and the University of Warwick who have helped me so much and whose support for the history of mathematics has been very important to me. Especially I wish to thank my co-authors and coeditors who have contributed so much. Above all I thank my wife and children for the love and joy they have brought to my life and for all that that has made possible.

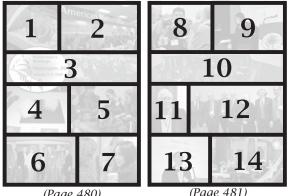
About the Prize

The Whiteman Prize is awarded every three years (every four years until 2009) to recognize notable exposition and exceptional scholarship in the history of mathematics. The prize was established in 1998 using funds donated by Mrs. Sally Whiteman, in memory of her husband, the late Albert Leon Whiteman. The prize carries a cash award of US\$5.000.

The Whiteman Prize is awarded by the AMS Council acting on the recommendation of a selection committee. For the 2009 prize, the members of the selection committee were: Bruce C. Berndt, Keith J. Devlin, and Harold M. Edwards (chair).

Previous recipients of the Whiteman Prize are Thomas Hawkins (2001) and Harold M. Edwards (2005).

2009 Washington, DC, **Joint Mathematics Meetings** Photo Key



- (Page 480)
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- 1. Glass art from the Mathematical Art Exhibit.
- 2. AMS booth in the Exhibits area.
- 3. Audience at a talk.
- 4. 3-D art from the Mathematical Art Exhibit.
- 5. Students around a computer.
- 6. Opening Ceremony for the Exhibits. Left to right: Robert Daverman (AMS), James Tattersall (MAA). Tina Straley (MAA). James Glimm (AMS). Joseph Gallian (MAA), John Ewing (AMS), Martha Siegel (MAA).
- 7. Participants conversing.
- 8. Networking.
- 9. MAA invited address speaker Maria Chudnovsky.
- 10. Networking Center.
- 11. John W. Neuberger, University of North Texas. Neuberger has attended 50 annual meetings.
- 12. Present and former AMS presidents and former Executive Director John Ewing. Left to right: George Andrews (2009-2010), James Arthur (2005–2006), James Glimm (2007–2008), Ewing, Cathleen Morawetz (1995-1996), Arthur Jaffe (1997-1998), David Eisenbud (2003-2004).
- 13. Harold A. Boas, of Texas A&M University, accepting the Chauvenet Prize. Boas was editor of the *Notices*, 2000-2003.
- 14. Employment Center.