



James Carlson

## Dear Friends of Mathematics,

In 2007 the Clay Mathematics Institute made major changes in the format and content of its Annual Meeting. The date was changed from November to May, and the program was expanded to a two-day series of lectures on recent research developments. Presentation of the Clay Research Awards, which had always been the focus of the Annual Meeting, took place on the afternoon of the first day. The 2007 Research Conference was held at Harvard on May 14 and 15. The 2008 Conference will be held at MIT on May 12 and 13. As in the past, the conference will alternate between MIT and Harvard. Videos of the 2007 lectures are posted on the CMI website, and future talks will appear there as well.

The inaugural Clay Research Conference marked an exceptional year for mathematics. Christopher Hacon and James McKernan received the Clay Research Award for their inductive proof of the existence of flips for algebraic varieties in dimension greater than three. This is a crucial step towards realization of the Mori minimal model program in all dimensions, which is one of the great outstanding problems in algebraic geometry. Michael Harris and Richard Taylor received the award for their proof of the Sato–Tate conjecture for elliptic curves with non-integral  $j$ -invariants. And Alex Eskin received the award for his proof of the quasi-isometric rigidity of  $\text{sol}$ , a longstanding problem in geometric group theory. These results follow closely other recent exceptional events in mathematics, e.g., Perelman’s solution of the Poincaré conjecture and the proof by

Ben Green and Terry Tao that there exist arbitrarily long arithmetic progressions in the primes. Our era is indeed a golden one for mathematics!

In 2006, CMI inaugurated the Clay Lectures in Mathematics, a series of talks by former Clay Research Fellows on topics of current interest. Ben Green and Akshay Venkatesh delivered the first series at Cambridge University in November of 2006. Elon Lindenstrauss and Mircea Mustata delivered the second series in December 2007 at the Tata Institute for Fundamental Research in Mumbai.

I am pleased to announce the formation of an editorial board for the Clay Mathematics Institute Monograph series, published with the American Mathematical Society. The Editors in Chief for the series are Simon Donaldson and Andrew Wiles. I will serve as managing editor, and there is a distinguished board of associate editors (see [www.claymath.org/monographs](http://www.claymath.org/monographs)). The third volume in the series, *Ricci Flow and the Poincaré Conjecture*, by John Morgan and Gang Tian, appeared in August, 2007. The series publishes selected expositions of recent developments, both in emerging areas and in older subjects transformed by new insights or unifying ideas. CMI takes great care in the editing and presentation of the final manuscript and in supporting a well-produced book. Authors with a project in mind are encouraged to contact an editor.

In closing, I would like to draw attention to CMI’s program of workshops held in Cambridge, Massachusetts. Ten have been held to date, and we generally schedule four to five per year. Our workshops are intended to be small, informal, and structured in whatever way the organizers deem best. CMI initiates workshops on its own and also seeks proposals. Proposals should be short, and the same is true of the lead-time between proposal and workshop.

Sincerely,

James A. Carlson  
President