



RICHARD P. STANLEY

Massachusetts Institute of Technology

will deliver the

LEONIDAS ALAOGLU MEMORIAL LECTURE

*Hyperplane arrangements in algebra, combinatorics,
geometry, and topology*

Tuesday, March 4, 1997, 4:15 p.m.
151 Sloan
California Institute of Technology

RICHARD P. STANLEY

Dr. Richard P. Stanley, one of the pioneers of algebraic combinatorics, received his B.S. in 1966 from the California Institute of Technology and his Ph.D. in 1971 from Harvard University, under the direction of Gian-Carlo Rota. He did postdoctoral work at the University of California, Berkeley before joining the faculty at the Massachusetts Institute of Technology in 1973 where he has served since. He has also held visiting positions at Caltech, the Mittag-Leffler Institute, and the Mathematical Sciences Research Institute, as well as being a consultant to JPL and Bell Labs.

Over the last three decades, Stanley has been a leader in algebraic combinatorics. He brought powerful algebraic techniques to bear on combinatorics problems in new and unexpected ways. Some of his best work is his contributions to the topology of partially ordered sets, in particular to Cohen-Macaulay posets and their associated Stanley-Reisner rings. Other major work of his includes results on f -vectors of convex polytopes, various unimodality results using tools from algebraic geometry, and his work on Schubert polynomials. He has also combinatorialized several subfields of Lie theory, commutative algebra, algebraic geometry and algebraic topology. The ability to make such major connections to other disciplines is rare in this day of specialization.

Stanley won the E.T. Bell Prize in 1965 for outstanding research by a Caltech undergraduate. He received the SIAM Polya Prize in Applied Combinatorics in 1975. In 1983-84, he held a Guggenheim Fellowship. He is a member of the American Academy of Arts and Sciences and the National Academy of Sciences. He has held various positions in the American Mathematical Society and Mathematical Association of America, and is presently Program Chair for MSRI.



CALIFORNIA INSTITUTE OF TECHNOLOGY

**LEONIDAS ALAOGU
MEMORIAL LECTURE
IN MATHEMATICS**

1997

The Leonidas Alaoglu Memorial Lecture was established by friends and family of the late Leonidas Alaoglu in recognition of his great talents, his distinguished contributions to mathematics, and his long friendship with Caltech. The Institute is privileged to honor his memory with a lecture each year by an outstanding mathematician.

