综合报告会

Lecture

国家数学与交叉科学中心

Time: 9:00 am, June 11, 2012
Venue: S712

The Role of Algebraic Geometry in Geometric Modeling

Speaker: Prof. Ron Goldman
Rice University

Abstract:
Algebraic geometry and geometric modeling both deal with curves and surfaces generated by polynomial equations. Algebraic geometry investigates the theoretical properties of polynomial curves and surfaces; geometric modeling uses polynomial, piecewise polynomial, and rational curves and surfaces to build computer models of mechanical components and assemblies for industrial design and manufacture. This talk will discuss past, present, and possible future contributions of algebraic geometric to advancing the goals of geometric modeling.

Brief CV:
Ron Goldman is a professor of Computer Science at Rice University in Houston, Texas. He received his B.S. in Mathematics from the Massachusetts Institute of Technology in 1968 and his M.A. and Ph.D. in Mathematics from Johns Hopkins Universityin 1973. He worked for ten years in industry solving problems in computer graphics, geometric modeling, and computer aided design. He served as a Mathematician at Manufacturing Data Systems Inc., and later worked as a Senior Design Engineer at Ford Motor Company, then a Principal Consultant for the development group devoted to computer aided design and manufacture in Control Data Corporation. He returned to academia as an associate Professor of Computer Science at the University of Waterloo in Ontario, Canada in 1987. He joined the faculty at Rice University in Houston, Texas as a professor of Computer Science in July 1990.

Professor Goldman's current research interests lie in the mathematical representation, manipulation, and analysis of shape using computers. His work includes research in computer aided geometric design, solid modeling, computer graphics, polynomials and splines. Dr. Goldman has published over a hundred articles in journals, books, and conference proceedings on these and related topics. Dr. Goldman is currently an Associate Editor of Computer Aided Geometric Design.