1046-00-1   **Percy Deift*** (`deift@cims.nyu.edu`), 251 Mercer Street, New York, NY 10012. *Integrable Systems: A Modern View.*

The modern theory of integrable systems began with the solution of the Korteweg de Vries equation by Gardner, Greene, Kruskal and Miura in 1967. This led to the development of a variety of new mathematical techniques, and over time, and quite unexpectedly, these techniques have found applications in areas far beyond their dynamical origins. The applications include problems in algebraic geometry, numerical analysis, analytic number theory, combinatorics and random matrix theory, among many others. In the Lecture, the speaker will present some of these techniques and describe some of their applications. (Received September 15, 2008)