ICM 1998, Berlin, Aug. 18–27

Abstracts of Plenary and Invited Lectures

Section:

11. Mathematical Physics

1991 MS Classification:

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Spectral Statistics

The aim of the lecture is to present an overview of statistical properties of energy eigenvalues of deterministic systems and related questions. The following subjects are shortly discussed: Distribution of energy eigenvalues for integrable and chaotic systems. Universality within standard random matrix ensembles. Distribution of zeros of number-theoretical zeta functions. Arithmetical models. Intermediate statistics. Approach to universal limit. Random polynomials.