1003-33-238   **Alexander R Its*** (`itsa@math.iupui.edu`), Department of Mathematical Sciences, IUPUI, 402 N. Blackford Street, Indianapolis, IN 46202-3216. *On the asymptotic analysis of Toeplitz determinants via the Riemann-Hilbert method.* Preliminary report.

We will discuss some aspects of the use of "integrable techniques" in the theory of Toeplitz determinants and its applications to random matrices and statistical mechanics. (Received September 01, 2004)