Meeting: 1003, Atlanta, Georgia, SS 31A, AMS Special Session on Integrable Systems and Special Functions, I

1003-60-22 **Alexander Soshnikov*** (soshniko@math.ucdavis.edu), UC Davis, One Shields Avenue, Department of Mathematics, Davis, CA 95616. *Poisson statistics for the largest eigenvalues of random matrices with heavy tails of matrix entries dustributions.*

We study large Wigner and sample covariance random matrices for which matrix entries have heavy tails of distributions (e.g. Cauchy). We prove that statistical properties of the largest eigenvalues are Poisson in the limit of large n. (Received May 12, 2004)