1052-60-293 Jinho Baik* (baik@umich.edu), 530 Church Street, Ann Arbor, MI 48103. Asymptotics of Tracy-Widom distribution functions.

Tracy-Widom distribution functions describe certain universal fluctuations appearing in random matrix theory and other probability settings. These functions are expressed in terms of Painleve II equation, which is an integrable nonlinear ODE. We discuss the asymptotics of the Tracy-Widom distribution functions. (Received August 31, 2009)