Michigan Math Club Thursday at 4pm in the Commons Free Pizza and Pop

Nuclei, Primes and Random Matrices David Montague



Abstract for 28 January 2010

In the early 1970's a remarkable connection was discovered between two different fields—nuclear physics and number theory. The connection was that random matrix theory accurately modeled problems in both fields. Here we will describe the connection between random matrix theory and number theory. We assume no familiarity with either subject. A basic understanding of linear algebra and probability theory may help but is not necessary. This talk is based on topics studied and on work done at an REU program at Williams College, the SMALL 2009 program.