

Particle/Nuclear/Astro Seminar

Prof. Djordje Minic

(Virginia Tech Physics)

The physics of the Riemann zeroes

Monday, Sept. 7

2:30 P.M.

304 Robeson Hall

I will explain the physics behind the famous Riemann hypothesis. In particular, I will deconstruct my recent work done in collaboration with Yang-Hui He of Oxford, UK and Vishnu Jejjala of IHES, France (arxiv:0903.4321[math-ph]). The emphasis will be placed on the Hilbert-Polya approach (i.e. trying to find a physical system with eigenvalues given by the Riemann zeros) and the crucial role played by the physics of quantum chaos, as originally pointed out by Michael Berry. Finally, I will outline what role a "chaotic Riemann string theory" is expected to play in connection with our recent results.