Fermi-Pasta-Ulam chains and their approach to thermal equilibrium

Monday, 23 March 2015 14:30 (45 minutes)

In 1953 Fermi, Pasta, and Ulam, technically supported by Tsingou, run pioneering numerical simulations on nonlinearly coupled oscillators. They wanted to test whether for long times the statistics is well described by the microcanonical ensemble, in particular confirm equipartition of energy. (The numerical findings were not too encouraging). In my talk, I will explain our current understanding of the issue raised by FPU.

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