1046-35-677   **Tao Luo*** (`tl48@georgetown.edu`), Washington, DC 20057, and **Joel Smoller**, Univeristy of Michigan, Ann Arbor, MI. *Stability of Newtonian Rotating White Dwarf Stars.*

In this talk, I will talk about the stability of rotating star solutions for the compressible Euler-Poisson Equations. The rotating star solutions are axi-symmetric steady-state solu- tions of the compressible isentropic Euler-Poisson equations in 3 spatial dimensions, with prescribed angular momentum and total mass. The stability of those solutions is proved by using several conservative quantities, such as mass, energy and angular momentum, for the evolutionary Euler-Poisson equations. Those results apply to white dwarf stars. (Received September 09, 2008)