1145-35-1206 Shijun Zheng* (szheng@georgiasouthern.edu), Department of Mathematical Sciences, Georgia Southern University, Statesboro, GA 30460. Virial identity for nonlinear dispersive equations. Preliminary report.

I will discuss the use of virial type identity for showing scattering, blowup and asymptotic stability for dispersive equations including nonlinear magnetic Schroedinger equation, fractional hartree equation as well as Dirac equation. In the energy-subcritical regime, the proof might involve local versions for the virial and Pohozaev identities. (Received September 20, 2018)