1146-22-33   **Shilin Yu*** (`yus@math.tamu.edu`), 155 Ireland Street, Blocker Building, 3368 TAMU, College station, TX 77840. *Coadjoint orbit method from a new perspective.*

The coadjoint orbit method of Kirillov and Kostant suggests that irreducible unitary representations of a Lie group can be constructed as geometric quantization of coadjoint orbits of the group. It encounters difficulties when the group is a noncompact reductive Lie group. I will propose a new way to quantize orbits using deformation quantization of symplectic varieties and their Lagrangian subvarieties. This is joint work in progress with Conan Leung. (Received December 12, 2018)