1100-93-347   **Takafumi Oki*** (`takafumi.oki@ttu.edu`), 303 Detroit Ave, Savoy 205, Lubbock, TX 79415.
Feedback Stabilization of Rotational Dynamical Systems on $SO(3)$.

In this talk, we discusses feedback stabilization problems for a class of Rotational Dynamical Systems on **SO(3)** characterized by **Tait-Bryan parametrization**. This dynamical system is used to describe human head movement from the point of view of stabilizing an equilibrium point of the dynamical system. We propose a damping type control law which minimizes certain type of meaningful cost functionals on the generalized torque input. (Received February 10, 2014)