1145-34-951 **Sougata Dhar*** (`sougata.dhar@maine.edu`), 5752 Neville Hall, Department of Mathematics & Statistics, Orono, ME 04469, and **Qingkai kong**. *Fractional Lyapunov-type Inequalities with Mixed Boundary Conditions on univariate and multivariate domains.*

Lyapunov-type inequalities are established for Riemann-Liouville fractional differential equations with order $\alpha \in (2, 3]$ and certain pointwise or mixed boundary conditions. Results are first given for univariate case, and then extended to multivariate case. All the results are new and one of them extends and improves substantially the one in the literature for third-order multivariate boundary value problems. (Received September 17, 2018)