A number of theoretical models have been proposed for Dark Energy ranging from the Cosmological constant to dynamic scalar fields. A big question is distinguishing between these models, first in theoretical terms which can lead to observational implications. It has been shown that any model of dark energy can be tuned to produce the same expansion history. In this work, we look at the question: how two different dark energy models; tachyonic field and scalar quintessence dark energy affect the dynamics of nonlinear perturbations. We first construct potentials for the two theories so as to get exactly same background evolution and then study nonlinear perturbations with the restriction of spherical symmetry. We solve for this completely relativistic nonlinear system numerically. We find that the differences are weak for models which are closer to the cosmological constant. Also we probe the dynamic(via scalar fields) nature of dark energy in contrast with static cosmological constant. This work is partially based on our article:

Pratap Rajvanshi, M., & Bagla, J. S. 2018, jcap, 6, 018 **arXiv:1802.05840**