Parth Mukeshbhai Shah\* (parthshah2908@gmail.com) and G. C. Samanta. Stability of cosmological models in modified gravity.

Modified gravity theories have received increased attention lately to understand the late time acceleration of the universe. Among numerous extensions to Einstein's theory of gravity, f(R) theories have received several acknowledgments. In our current work we try to understand the acceleration of the universe in modified geometric space using dynamical system analysis. This technique also allows understanding the behavior of the universe and its stability analysis which could then be compared with observational data. (Received August 16, 2019)