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New outlook on the observational limits to cosmic 'dark' flow from landscape multiverse¹ MAYUKH GANGOPADHYAY, GRANT MATH-
EWS, University of Notre Dame — In a series of papers by L. Mersini-Houghton et al. introduced the Landscape Multiverse scenario. In their new theory of Landscape, they have taken Quantum Mechanics as the fundamental theory of nature at any energy scale. In this framework they have tried to explore different aspects of cosmology, one of them was the observed 'Dark' Flow. In their paper they have shown one can explain cosmic 'Dark Flow' from the nonlocal entanglement of our Hubble volume with modes and domains beyond the horizon. At that time Kashlinsky et al. observed dark flow to be about 700 km/s and that matched quite well with the prediction by Mersini-houton et al. But later PLANCK has constrained the 'dark' flow velocity to a much lower value. Mathews et al. has shown that a 'dark' flow velocity less than 300km/s is very hard to observe. Now in this work we tried to calculate the 'dark' flow velocity for a particular kind of potential and we got quite low 'dark' flow velocity around 250 km/s with some uncertainties. The potential is also of interest as it can actually explain a 'dip' observed in the low l region in the CMB power spectrum.

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