## Abstract Submitted for the APR18 Meeting of The American Physical Society

Evanescent dark energy and dark matter<sup>1</sup> MAURICE VAN PUTTEN, Sejong Univ — The cosmological distributions of dark energy and dark matter are identified with evanescent waves crossing the cosmological horizon. A detailed confrontation with cosmological data on the Hubble parameter gives  $H_0 = 74.29 \pm 2.6$ , consistent with Anderson Riess (2017) and Guidorzi et al.(2017) from GW170817. This result derives from  $\Lambda = \omega_0^2$  derived from the eigenfrequency  $\omega_0 = \sqrt{1-q}H$ , where q is the deceleration parameter, based on the Gauss-Bonnet theorem. A further detailed consideration of galaxy dynamics against data from Lellie et al.(2016) and Genzel et al.(2017) points to a dark matter mass of less than  $10^{-30} \text{eV}$ . (Based on van Putten, 2017, ApJ, 848, 28; ApJ 837, 22.)

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