Abstract Submitted for the MAR17 Meeting of The American Physical Society

Effect of membrane coupling on multiple-kinesin transport JOSEPH LOPES, University of California, Merced, DAIL CHAPMAN, University of California, Irvine, LINDA HIRST, JING XU, University of California, Merced — Molecular motor-based transport is critical for all eukaryotic cell function and health. Although traditionally examined in the context of single motor experiments, molecular motors often work in small teams together to transport the same cargo in vivo. Factors that control and regulate the group function of multiple motors has remained unclear. Here we used a simple lipid bilayer to couple kinesin motors together, and used microtubule gliding assay to examine the effect of this membrane coupling on the group function of multiple kinesin motors.

> Joseph Lopes University of California, Merced

Date submitted: 10 Nov 2016

Electronic form version 1.4