Abstract Submitted for the NEF10 Meeting of The American Physical Society

Single Molecule Travel in a Nanotube RICHARD KRISKE, University of Minnesota — When single molecules, atoms or elementary particles such as electrons travel through a nanotube they should travel in the center of the tube, unless there is an obstruction. The symmetry of the tube seems to indicate that the path of least resistance is in the center of the tube. The size of the tube needs to be considered for each type of molecule or particle. What are the general characteristics of this travel and can there be a general mathematical model for different types of tubes?

Richard Kriske University of Minnesota

Date submitted: 17 Aug 2010 Electronic form version 1.4