Reza R. Ahangar* (reza.ahangar@tamuk.edu), 700 University MLVD, MSC 172, Mathematics Department, Texas A & M University-Kingsville, Kingsville, TX 78363. Unifying Forces in Complex Matter Space (CMS).

It is assumed that matter has two intrinsic components, i) mass, and ii) charge, that is M=m+iq for a particle in a complex plane. A different view of matter, energy, and momentum is presented. A consistency of this theory with relativity and quantum mechanics is investigated. The consistency of CMS is demonstrated in Hilbert Space (hyperbolic and Minkowski) Geometry. This approach can be used to study the unifying forces in the universe. (Received September 26, 2017)