1154-81-112 **Michael G. Dombroski*** (dombroskistm11@verizon.net). *A step toward the T:O:E: with Fermion and Boson matrices; using both Transpose(\) and Cispose(/) operations.* Preliminary report.

Dr. Don Lincoln, a senior physicist at Fermilab, wrote an article in SA Nov2012. In it he referred to "a theory of sublime simplicity". He was talking about a straight-forward model of "preons" proposed independently in 1979 by Haim Harari, Michael A. Shupe, and Nathan Seiberg. In this paper we extend the work of HSS by using two sets of nine real 3x3 Universal Base Matrices (UBS and ubs). The "average" of the elements of one set is (0), the other (+1/3), both the same as HSS. This is hypothesized to be the relation of mathematics to physics. The Transpose(n) with the mate Cispose(/), generate new, real, Fermion and Boson Matrices, whose elements are also matrices. E, S, W, and G are defined to represent forces that are acted on by (\) and (/), giving Et, Ec, St, etc. The result is a large variety of matrices, with multiple symmetries and magnitudes. (Received August 09, 2019)