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Michael George Dombroski*, dombroskistm11@verizon.net. *From Harari, Shupe, and Seiberg; to Kalusa & Einstein, using Transpose(\) with Cispose(/) and Eigen-Matrices, to obtain Fermion and Boson matrices at the origin of the universe.* Preliminary report.

Dr. Don Lincoln, a senior physicist at Fermilab, wrote an article in SA Nov12. about Haim Harari, Michael A. Shupe, and Nathan Seiberg. Here 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). This is analogous to the electric charges of HSS. The Transpose(\) with the new Cispose(/), generate real, Fermion and Boson Matrices. This gives a new, complete, and extremely high degree of symmetry, to physics. A 9x9 matrix is generated, whose 81 elements are themselves also matrices, but 3x3. They are exclusively only one of 4 types. These "types" of 3x3 integer matrices are called "shapes", depending on the location of the zero elements. They are tentatively named: G, S, W, E, analogous to the 4 forces. One result is an unexpected mathematical symmetry of disorder/order. For successive increased powers, the disorder number's power increases, but the order number's power is hypothetically always constant. Thus we hypothesize a classical, non-statistical, observable, analog of the Big Bang initial conditions. This allows us to "see" the "order" of the origin of the universe, through the fog of seeming "disorder". <http://dombroskiSTM.org/com/net> (Received September 17, 2017)