Abstract Submitted for the MAR14 Meeting of The American Physical Society

Two Dimensions of Time could produce a New Supersymmetric **Theory** RICHARD KRISKE, University of Minnesota — In the collapse of a system into the eigenstate of an operator, a new type of time, call it "information time," could be inferred. One could look at this time to evolve the quantum state as a type of "mass." This would be a correction to the explaination to the existing Higgs mechanism. Likewise one could see the dual of this in the Dilation in "clock time" seen in Special Relativity. In other words we see a time Dilation in "Information Time" as being a delay in Acceleration which we call "mass." The two types of Time are Duals to each other and are symmetric. The second dimension of time has been overlooked for this reason. Time Dilation is the dual to persistance of the collapse of a system. This Duality produces some interesting and measurable effects. One conclusion that one can draw from this "Symmetry" is that there is a non-commuting set of operators, and a particle that connects the two "Perpendicular" time axis. We know from classical Quantum Theory that Momentum and Position do not commute, and this is something like the Noncommuting Time Dimensions, in that Momentum has a time-like construction and Position has a Space like construction, it is something like x, and t, not Commuting. What is the Conserved Quantity between the two types of time, is it Energy?

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