1086-VR-413 **Martin Concoyle*** (martinconcoyle@hotmail.com). *A new context in which to apply geometry to: math, quantum physics, and the solar system, etc.*

Quantum physics assumes the global and descends to the local (ie random particle-spectral measures). Is geometry a better vehicle to define the stability of quantum systems rather than function spaces?

Is the stable construct to be the very stable discrete hyperbolic shapes, in a many-dimensional context?

A geometrically stable and spectrally finite math construct, where, in adjacent dimensional levels, the bounding discrete hyperbolic and Euclidean shapes are defined, and then mixed as "metric-space states" in a Hermitian (or unitary) context, can provide a structure for stable properties.

Assume that math be consistent with (local) geometric-measures of stable shapes, which define finite spectral sets, contained in higher-dimensions. The stable shapes in the different dimensional levels are con-formally similar, and resonate with a finite geometric-spectral set contained in a high-dimension space.

A new interaction type consists of a combination of hyperbolic and Euclidean components, but when in an "energy-size range" the system can resonate with the spectra of the containing space, and thus it can change to a new stable, discrete shape. (Received August 30, 2012)