Abstract Submitted for the MAR10 Meeting of The American Physical Society

Steinberg "AUDIOMAPS" Music Appreciation-Via-Understanding: Special-Relativity + Expectations "Quantum-Theory": a Quantum-ACOUSTO/MUSICO-Dynamics (QA/MD) R. STEINBERG, E. SIEGEL, F=C/C-S/La Jolla — "AUDIOMAPS" music enjoyment/appreciationvia-understanding methodology, versus art, music-dynamics evolves, telling a story in (3+1)-dimensions: trails, frames, timbres, + dynamics amplitude vs. music-score time-series (formal-inverse power- spectrum) surprisingly closely parallels (3+1)dimensional Einstein (1905) special-relativity "+" (with its enjoyment- expectations) a manifestation of quantum-theory expectation-values, together a music quantum-ACOUSTO/MUSICO-dynamics (QA/MD). Analysis via Derrida deconstruction enabled Siegel- Baez "Category-Semantics" "FUZZYICS"="CATEGORYICS ("SON of 'TRIZ") classic Aristotle "Square-of-Opposition" (SoO) DEduction-logic, irrespective of Boon-Klimontovich versus Voss- Clark[PRL(77)] music power-spectrum analysis sampling-time/duration controversy: part versus whole, shows that "AU-DIOMAPS" QA/MD reigns supreme as THE music appreciation-via- analysis tool for the listener in musicology!!! Connection to Deutsch-Hartmann-Levitin[This is Your Brain on Music, (2006) brain/mind-barrier brain/mind-music connection is both subtle and compelling and immediate!!!

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