Riemann-Hypothesis Millennium-Problem(MP) Physics Proof via CATEGORY-SEMANTICS(C-S)/F=C Aristotle SQUARE-of-OPPOSITION(SoO) DEduction-LOGIC DichotomY JOAO-JOAN BAEZ, MICHELLE LAPIDARYUS, EDWARD CARL-LUDWIG SIEGEL, FUZZYICS = CATEGORYICS = PRAGMATYICS("Son of 'TRIZ'")/CATEGORY-SEMANTICS COGNITION — Riemann-hypothesis physics-proof combines: Siegel-Antono®-Smith[AMS Joint Mtg.(2002)- Abs.973-03-126] digits on-average statistics HIll[Am. J. Math 123, 3, 887(1996)] logarithm-function's (1,0)- xed-point base=units=scale-invariance proven Newcomb [Am. J. Math. 4, 39(1881)]-Weyl[Goett. Nachr.(1914); Math. Ann.7, 313(1916)]-Benford[Proc. Am. Phil. Soc. 78, 4, 51(1938)]-law [Kac,Math. of Stat.-Reasoning(1955); Raimi, Sci. Am. 221, 109(1969)] algebraic-inversion to ONLY Bose-Einstein quantum-statistics(BEQS) with digit d = 0 gapFUL Bose-Einstein Condensation(BEC) insight that digits are quanta are bosons because bosons are and always were quanta are and always were digits, via Siegel-Baez category-semantics tabular list-format matrix truth-table analytics in Plato-Aristotle classic "square-of-opposition" : FUZZYICS=CATEGORYICS/Category-Semantics, with Goodkind Bose-Einstein Condensation (BEC) ABOVE ground-state with/and Rayleigh(cut-limit of "short-cut method";1870)-Polya(1922)-"Anderson"(1958) localization [Doyle and Snell,Random-Walks and Electrical-Networks, MAA(1981)-p.99-100!!!] in Brillouin[Wave-Propagation in Periodic-Structures(1946) Dover(1922)]-Hubbard-Beeby[J.Phys.C(1967)] Siegel[J.Nonxline-Sol.40,453(1980)] generalized-disorder collective-boson negative-dispersion mode-softening universality-principle(G...P) first use of the "square-of-opposition" in physics since Plato and Aristote!!!

Joao-Joan Baez
FUZZYICS = CATEGORYICS = PRAGMATYICS("Son of 'TRIZ'")/
CATEGORY-SEMANTICS COGNITION