

Abstract Submitted  
for the MAR16 Meeting of  
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**Bosonics: Phononics, Magnonics, Plasmonics in Nano-Scale Disorder(Nanonics), Metamaterials, Astro-Seismology (Meganonics): Brillouin-Siegel GENERIC: Generalized-Disorder Collective-Boson Mode-Softening Universality-Principle (G...P) With PIPUB Many-Body Localization EDWARD SIEGEL, FUZZYICS=CATEGORYICS=ANALOGYICS=PRAGMATYICS/CATEGORY-SEMANTICS**

ONTOLOGY COGNITION ANALYTICS — Siegel and Matsubara[Statphys-13('77); Intl.Conf.Lattice-Dyn.('77);Scripta Met.13,913('80)];JMMM:5, 1, 84 ('77);22,1:41,58('80);Mag.Lett.('80);Phys./Chem.Liquids:4,(4) ('75);5,(1)( 76)] generalization to GENERIC Siegel[J.Non-Xline-Sol.40,453('80)] G...P GENERIC Brillouin[Wave-Propagation in Periodic-Structures('22)]-Landau['41]-Feynman['51]-de Boer[in Phonons/Phonon-Interactions('64)]-Egelstaff[Intro.Liquid-State('65)]-Hubbard-Beebe[J.Phys.C('67)]-

“Anderson”[1958]- Siegel [J.Non-Xl.-Sol. 40, 453('80)] GENERIC many-body localization. GENERIC Hubbard-Beebe[J.Phys.C('67)] static structure-factor  $S(k)$  modulated kinetic-energy  $\omega(k)=\hbar^2 k^2/2mS(k)$  expressing G...P (“bass-ackwardly”) aka homogeneity and isotropy creates GENERIC G...P with GENERIC pseudo-isotropic pseudo-Umklapp backscattering (PIPUB) for GENERIC many-body localization of and/or by mutually interacting collective-bosons: phonons(phononics) with magnons(magnonics) with plasmons(plasmonics) with fermions (electrons, holes)...etc. in nano-scale “disorder”, metamaterials and on very-macro-scales (surprisingly) Bildsten et.al. astro-seismology(meganonics) of red-giant main-sequence stars(Mira, Betelgeuse)!

FUZZYICS=CATEGORYICS=ANALOGYICS=PRAGMATYICS/CATEGORY-SEMANTICS ONTOLOGY C

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