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An Integrated Higgs Force Theory ANTONIO COLELLA¹, IBM Retired — An Integrated Higgs force theory (IHFT) was based on 2 key requirement amplifications: a matter particle/Higgs force was one and inseparable; a matter particle/Higgs force bidirectionally condensed/evaporated from/to super force. These were basis of 5 theories: particle creation, baryogenesis, superpartner/quark decays, spontaneous symmetry breaking, and stellar black holes. Our universe's 129 matter/force particles contained 64 supersymmetric Higgs particles; 9 transient matter particles/Higgs forces decayed to 8 permanent matter particles/Higgs forces; mass was given to a matter particle by its Higgs force and gravitons; and sum of 8 Higgs force energies of 8 permanent matter particles was dark energy. An IHFT's essence is the intimate physical relationships between 8 theories. These theories are independent because physicists in one theory worked independently of physicists in the other seven. An IHFT's premise is without sacrificing their integrities, 8 independent existing theories are replaced by 8 interrelated amplified theories. Requirement amplifications provide interfaces between the 8 theories. Intimate relationships between 8 theories including the above 5 and string, Higgs forces, and Super Universe are described.

¹The sorting category selected was F. PARTICLES AND FIELDS (e.g., F1 Higgs Physics, F10 Alternative Beyond the Standard Model Physics, F11 Dark Sector Theories and Searches, and F12 Particle Cosmology).

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