

1 *Review*

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3 **What is Fine-structure Constant?**

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5 **Abstract:** We explain fine-structure constant as equal to, or greater than, the reciprocal of the natural
6 logarithm of the age of the universe, 60 orders of magnitude in Planck times, potentially reconciling
7 quantum reversibility of universe's entropy, consistent with Maxwell demon. We invoke Boltzmann
8 law, quantum information theory and second law of thermodynamics. Quantum fluctuations of
9 particles postulated as spread out and each communicating via a quantum bridge to the surroundings
10 potentially explain strong coupling, quantum entanglement and other issues. We meet the minds of
11 giants like Gamow and Eddington and many more. Ref: physics/0210040 v3 (revised 2007).