

Abstract Submitted  
for the DNP08 Meeting of  
The American Physical Society

**Deeper Probing of the Fine-structure Constant** SHANTILAL GORADIA, Gravity Research Institute, Inc. — In our earlier attempt in [1] to derive fine-structure constant, one subtle reason why the natural logarithm of the age of the universe in Planck times comes out to be slightly greater than the reciprocal of the fine structure constant is that the variable  $W$  in Boltzmann's expression should be the age of the universe in Planck times divided by the bit depth for our specific application. Since we cannot decode the nature's bit depth, we cannot come up with the expected value of ALPHA. For an assumed bit depth of 10, the reciprocal of ALPHA goes down by  $\ln 10$  (2.3) without having a significant impact on the order of magnitude of the baud rate (baud rate = bits per second/bit depth =  $10^{43}$  (Planck time/second)/10 =  $10^{42}$ ). Use of terms and equations from informatics in both of author's interrelated abstracts this meeting is meant to engage a wider audience simply. [1] Goradia, Shantilal "What is Fine-structure Constant?" <http://www.arXiv.org/pdf/physics/0210040v3>.

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Date submitted: 02 Jul 2008

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