

# ON RELATIONSHIP BETWEEN FUNDAMENTAL PHYSICAL CONSTANTS

N.A. Miskinova<sup>1</sup>, B.N. Shvilkin<sup>2</sup>

<sup>1</sup> *Moscow Technical University of Communication and Informatics, Moscow, Russia*

<sup>2</sup> *Lomonosov Moscow State University, Moscow, Russia*

**Abstract.** A formula is proposed which allows calculating the value of the fine structure constant. This value differs from that one measured by modern experimental methods only in the eighth – tenth digit. The formula also predicts radiation with frequency approximately  $10^{12}$  Hz and allows calculating the potential of ionization for hydrogen. An attempt of explanation of this formula is undertaken.

**Keywords:** fundamental physical constants, light speed, mass, proton, electron.