

Role of Planck and Hubble Mass in Understanding Growth Rate, Temperature and Redshift of the Growing and Light Speed Rotating Black Hole Universe

U. V. S. SESHAVATHARAM¹ AND S. LAKSHMINARAYANA²

¹Honorary faculty, I-SERVE, Alakapuri, Hyderabad-35, India
seshavatharam.uvs@gmail.com

²Dept. of Nuclear Physics, Andhra University, Visakhapatnam-03, India.
Insrirama@yahoo.com

Abstract: Throughout the cosmic evolution, currently believed cosmic ‘critical density’ can be shown to be a default result of the ‘positively curved’ light speed rotating black hole universe ‘volume density’. As there is no observational or experimental evidence to Friedmann’s second assumption, the density classification scheme of Friedmann cosmology must be reviewed at fundamental level and possibly can be relinquished. The observed cosmic redshift can be reinterpreted as an index of ‘cosmological’ thermodynamic light emission mechanism. Clearly speaking during cosmic evolution, at any time in the past, in hydrogen atom- emitted photon energy was always inversely proportional to the cosmic temperature. Thus past light emitted from older galaxy’s excited hydrogen atom will show redshift with reference to the current laboratory data. Note that there will be no change in the energy of the emitted photon during its journey from the distant galaxy to the observer. By considering the ‘Planck mass’ as the initial mass of the baby cosmic black hole, past and current physical and thermal parameters (like angular velocity, growth rate, age, redshift, thermal energy density and matter density) of the cosmic black hole can be understood. For a cosmic temperature of 3002 K, obtained redshift is 1100. From now onwards, CMBR temperature can be called as ‘Comic Black Hole’s Thermal Radiation’ temperature and can be expressed as ‘CBHTR’ temperature. Uncertainty relation and all other microscopic physical constants play a crucial role in understanding the halt of the present cosmic expansion. In view of the confirmed zero rate of change in the current CMBR temperature (from satellite data) and zero rate of change in the current Hubble’s constant (from satellite data), it can be suggested that, current cosmic expansion is almost all saturated and at present there is no significant cosmic acceleration.

Keywords: Mach’s principle, Planck mass, Black Hole Cosmology, Cosmic growth index, Cosmic growth rate, Hubble Potential, Cosmic redshift, Cosmic age, Halting of Cosmic Expansion, Final Unification.