## On a new pre big bang cosmological model

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### Abstract

Einstein's general relativity theory predicts that our universe started from the big bang singularity. In 1929, Edwin Hubble observed this. NASA's observations and experiments verified this. Recently, Penrose and Gurzadyan proposed pre big bang phenomena.In this short work, the author introduces a new model of pre big bang phenomena.

Key words : Singularity, big bang,CCC, pre big bang physics

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# New model of pre big bang phenomena

(1)According to standard model of cosmology, space and time started at the big bang.But this space is ONLY a manifested physical space(MPS).

(2) There is un-manifested Supreme Space(UMSS). The UMSS holds our MPS.

(3) The UMSS has a number of, or even infinity of singularities. In the figure the dots denote spacetime singularities.

(4) There are a number of big bangs in the UMSS.In the figure A and B are such

Big bang and expanding Universes.

(5) There are multiverses in the UMSS.In the figure , the universes above A and B represent such universes.

(6) The collision of two singularities gave birth to our universe. This is the big bang. This occurred in the UMSS.

(7) The expansion of our universe and other universes are due to the pulling gravitational forces of near by singularities.

(8) When a singularity in the UMSS approaches our universe and other universes the rate of expansion of MPS increases.i.e acceleration of the expansion of MPS occurs.

(9) When a singularity in the UMSS nears a universe of MPS, UMSS swallows MPS. This is the end of the MPS.

(10) Then creation of a new MPS starts when two or more singularities collide with each other in UMSS.

The author is currently working on the mathematical formulation of this new model of pre big bang model.

#### References

[1] Palmer, Jason (2010-11-27). <u>"Cosmos may show echoes of events before Big Bang"</u>. BBC News. Retrieved 2010-11-27.

[2] Penrose, Roger (June 2006). <u>"Before the big bang: An outrageous new perspective and its implications for particle physics"</u>. Edinburgh, Scotland: Proceedings of EPAC 2006. pp. 2759–2767. Retrieved 2010-11-27.

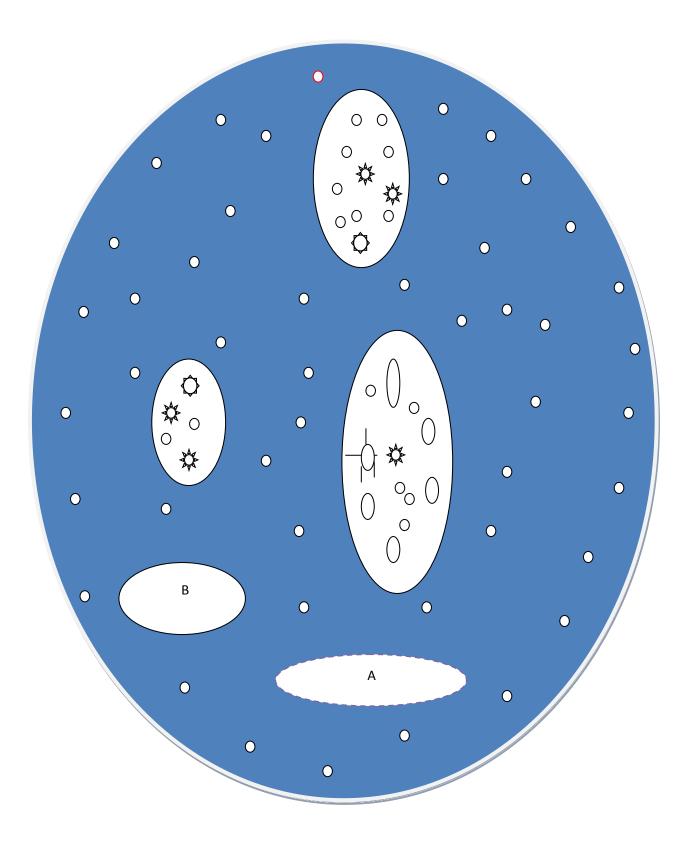
[3] Gurzadyan VG, Penrose R, "On CCC-predicted concentric low-variance circles in the CMB sky", Eur.Phys.J. Plus 128 (2013) 22; <u>http://arxiv.org/abs/1302.5162</u>

[4] Cartlidge, Edwin (2010-11-19). <u>"Penrose claims to have glimpsed universe before Big</u> <u>Bang"</u>. physicsworld.com. Retrieved 2010-11-27.

[5] Roger Penrose (2006). <u>"Before the Big Bang: An Outrageous New Perspective and its</u> <u>Implications for Particle Physics"</u>. *Proceedings of the EPAC 2006, Edinburgh, Scotland*: 2759–2762.

[6] Gurzadyan VG; Penrose R (2010-11-16). "Concentric circles in WMAP data may provide evidence of violent pre-Big-Bang activity". <u>arXiv:1011.3706</u> [astro-ph.CO].

[7] Gurzadyan VG; Penrose R (2010-12-07). "More on the low variance circles in CMB sky". <u>arXiv:1012.1486 [astro-ph.CO]</u>.



A Model of Un manifested Supreme Space Phenomena