

WELCOME TO EJTP AND 26th ISSUE!

Dear Friends of EJTP,

Here we are with our new issue; just shortly delayed for some technical difficulties. The quantum cosmology is entering a new phase of predictions: if the Universe origin is highly non-local, we must search for its quantum "tracks": it's what C. Corda with his Gravity's Primordial Breath, Leonardo Chiatti in Archaic de Sitter cosmology, developed with the author of this note, and H. Kleinart with a "Purely geometrical" interpretation of dark matter do. It seems that the "classic" big bang will come out totally transformed. A remarkable sequence of theoretical physics is represented by the Landau-Ginzburg model for the Chern-Simon pseudo-photons by Pedro Castelo Ferreira, the problems of quantum information and entropy by FAR Navarro, the hypothesis of monopoles in strong interactions by Comay (a question requiring a non-perturbative approach to chromodynamics), and the study of 3D Self-Dual Gauge Field Model by C. Papachristou.

Lawrence Crowell proposal is suggestive, quantum gravity is treated as quantum encryption system by starting from black hole microstates modeled by the integer partition function so suggesting that the most general symmetry for quantum gravity and cosmology is the Jordan matrix algebra. Xiao Ke and M. A. A. Sbaih deal with foundational problems of quantum mechanics, and Yuriy Yaremko- in the best tradition of the Russian school - studies the Radiation Reaction and Renormalization for a Photon-Like Charged Particle.

The work on Quasi-crystals by Hagen Kleinert is a beautiful example of how the imagination of physicists and mathematicians can grasp something that is "in the air" and anticipates the experimental observations (Sir Roger Penrose knows it!): in 2011 Dan Shechtman was awarded with the Nobel Prize in Chemistry for his thirty-year-work on quasi-crystals (1998 Israel Prize, Wolf Prize, 1999). S. Hejazian et al. (Bi-parameter Semigroups of linear operators), Talat Korpınar et al. (Involute Curves Of timelike Biharmonic ReebCurves (LCS) 3 - Manifolds), S. And Debnath, B. Biswas (Analytical Solutions of the Klein-Gordon Equation for Rosen-Morse Potential via Asymptotic Iteration Method) and Igor Hrnčić (Finite Time Existence of Solutions of Navier-Stokes Equations) lead us in the elegant strathosphere of mathematical physics. Yasuhito Kamina follows the great legacy of Kobayashi with his job on the differential forms in Gravity Theories.

Levy's work takes us into the lively debate on the ether modern theories, suggestions for the study of the quantum vacuum and the application range of relativistic symmetries. K. S. Adhav, S. Rama Singh and Archana Singh, Naseer Iqbal et al. continue that work on cosmological models which is a major test of observational cosmology.

Lawrence B. Crowell's paper on quantum gravity of counting states in spacetime. Hassan Amirhashchi's paper on the cosmological models, the role of electromagnetic field in the stiff and anti-stiff l.r.s bianchi type II universe.

Last but not least, this is the Turing Year (Alan Mathison Turing, 23 June 1912 - 7 June 1954), for physicists it is an incentive to search for new and deeper connections between Physics and Computation, especially for what is connected to the quantum texture of the World. And we also want to remember him by reproposing here his last four postcards he sent to Robin Gandy in March 1954, titled: Messages from the Unseen World:

III The Universe is the interior of a Light Cone of the Creation.

IV Science is a Differential Equation. Religion is a Boundary Condition [Signed "Arthur Stanley" and with a post script "? Does the gravitation constant decrease?"]

V Hyperboloids of wondrous Light Rolling for aye through Space and Time [Shelter] Harbour there Waves which somehow Might Play out God's holy pantomime.

VI Particles are founts

VII Charge = e/π arg of character of a 2π rotation

VIII The Exclusion Principle is laid down purely for the benefit of the electrons themselves, who might be corrupted (and become dragons or demons) if allowed to associate too freely."

Our sincere thanks to all the authors who have contributed to this issue, we wish to extend our heartfelt gratitude to the referees and EJTP editors, especially, J. Lopez-Bonilla for reviewing, proofreading and correcting the papers.

Ready, and Enjoy!

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