**Solution For The Crises In Cosmology**

Author: ing. Dan C. M. Visser[1]

Date: July 6 2020

**Abstract.**

In reaction on the debate about the crises in cosmology, held at the Kavli Institute California USA, I bring forward to Dr. Adam Riess (John Hopkins University) a proposal, which exactly connects to the result of HOLiCOW measurements of a cosmological constant of 73.3 km/s/Mpc.

**Proposal for solution.**

The debate refers tot the six different present-day measured cosmological constants $H_0$ compared to two early-universe measured $H_0$. (refering to an article in Quanta Magazine[2]).

The main-issue in my proposal is based firstly on replacing the Planckborder by a Hologram Tensor and secondly (thereto) dismissing the classical Big Bang universe as a fundamental universe.

So, based on these two ingredients this proposal emerges a new cosmological model to understand these differences. I called that new model the RTHU, an abbreviation of *Rotating Torus Hologram Universe*. The RTHU embeds mutual shifted holograms in “torus carousel”. We speak about a rotating torus wherein each hologram is experienced as a Big Bang universe.

So all the Big Bang formulas and rules stay in tact in the RTHU, but the origin of spacetime is changed in a hologram and there-after.

However, my proposal shows reasoning and arguments for calculations in handwritten notes as a raw attempt to solve the crises in cosmology, beacuse why is $H_0$ not constant in sigma 5 respected measurement-projects? There is difference of about 10%!

Forgive me, I am a dutch independent cosmologist and art-painter, but my RTHU-formulas prove dark energy is variable, instead of constant, which marks my cognitivity. Different cosmological constants are common in the Holograms of the RTHU.

However, and nevertheless, the RTHU-scale-enlargement compared to the classical Big Bang-universe (applied in this proposal), enables to recalculate of what the cosmological constant is in the classical Big Bang-universe. Precisely this fact proves that the introduction of the RTHU is a very realistic perspective.

**handwritten copies in this article are raw.**

Although my handwritten page-copies are raw, they contribute to my concern of a “clean” universe. Let me tell you this: “As an independent cosmologist and art-painter I wrote a series of ‘in-cascade-written’ articles in order to puzzle-out what the physical universe could be like otherwise. This has led to the introduction of the RTHU and the Hologram Tensor by bypassing institutional creativity: I followed my own creativity. So, after having read about the the different
cosmological constants measured in different projects I got inspired to an additional puzzle in order to discover one of the matching cosmological constants $H_0$ by a nonconformal manner.

In this respect my handwritten page-copies show an overview of my formulas, which were earlier applied in my theoretical analyses in my articles. Therein I consequently used algebra (also dimensinally) and an alternative method to maintain the conservation of information in the universe in general, otherwise than predicted by quantumtheory only.

I started my analyses in 2004, publishing in vixra in 2009 untill today. I am 72 now (born in 1947), had a starting-career in electronics, projects and advisory, however, changed my interest towards cosmology, including making-paintings (they breath the cosmos of me, DAN, rare, exclusive and intersting for art-collectors and musea[3]).

**Method to upgrade the Classical Big Bang Theory.**

My Hologram Tensor replaces the Planckborder by a formula, which firstly enlarges the dimensions of Planck-gravity and secondly changes the Planckborder in a Planck-Torus. Thirdly it determines the Planck domain by ‘duo-bits’. These are information-bits that change quantum-entanglement and hence quantum gravity.

In a specific way the Hologram Tensor is an energy-matrix representing sub-quantum-information additional to general relativity. This beyond quantum, however, we speak of pointparticles (no strings), so determination is extended to the determination of the Standard model of forces and particles. My Hologram-formula uses ‘values’, which change the dimensions in the “dark-zone”.

From thereon I focussed on vacuum-energydensity calculated according to quantumdynamics on $10^{120}$, which is an extreme large factor compared to the value calculated according to general relativity. However, this factor has been reduced to 1 in the RTHU by enlarging the classical space (3D), causing enlargement of a length by $10^{40}$ and hence affecting the dimension-scale for $H_0$. So, for further readings go to the handwritten pages.

**Apology**: I used “,” instead of “.” in my calculation-numbers for decimales. However, that is typical dutch; but I’m sorry. You’ll understand.
Raw handwritten page/copies (pre-page and page 1 to 6) for the path to the solution of the crises in cosmology.

Pre-page: Overview formulas RTHU, a new cosmological model for the universe by Dan Visser[^4], Almere, the Netherlands (June 30 2020) and his idea for an "ufo" using dark matter force and dark energy to bypass Big Bang spacetime by Hologram-information-dynamics.

Page 1: The Planck Torus

Page 2: Variable dark energy in the RTHU
Page 3: The RTHU proves to be realistic

Page 4: Calculation enlargement factors for $H_0$

Page 5: The exact (RTHU) HOLiCOW $H_0$

Page 6: For my study: The HOLiCOW view
References.

[1] contact email dan.visser@planet.nl or phone 0031 36 54 99 701

