



Dimi Chakalov <dchakalov@gmail.com>

Re: Thank you

Dimi Chakalov <dchakalov@gmail.com>

Wed, Mar 31, 2021 at 1:52 PM

To: Zhaoyan Wu <zhaoyanwu2000@yahoo.com>, norbert.straumann@gmail.com, jacobson@umd.edu, joergf@maths.otago.ac.nz, vrovenski@univ.haifa.ac.il, yuyuetony@gmail.com, gian-michele.graf@itp.phys.ethz.ch, irod@princeton.edu, kiefer@thp.uni-koeln.de, may@math.uchicago.edu, lee@math.washington.edu, rendall@unimainz.de, deepthought@asu.edu, michal.p.heller@aei.mpg.de, gerhard.heinzl@aei.mpg.de, georgi.dvali@physik.unimuenchen.de, andreas.doering@comlab.ox.ac.uk, erik@strangebeautiful.com, hand@chalmers.se, todd.oliynyk@monash.edu, jeremie.joudioux@aei.mpg.de, ettore.minguzzi@unifi.it, roland.steinbauer@univie.ac.at, wolfgang.reiter@univie.ac.at, klaus.schmidt@univie.ac.at, jakob.yngvason@univie.ac.at, michael.kunzinger@univie.ac.at, robert.beig@univie.ac.at, piotr.chrusciel@univie.ac.at, rteams@esi.ac.at, david.fajman@univie.ac.at, gary@physics.ucsb.edu, galloway@math.miami.edu, fermilab@fnal.gov, unruh@physics.ubc.ca, xzhang@amss.ac.cn, laan@aei.mpg.de, dmalaman@uci.edu, yraptis@central.ntua.gr, niall@ucc.ie, cmchen@phy.ncu.edu.tw, nester@phy.ncu.edu.tw, tod@maths.ox.ac.uk, seri@math.princeton.edu, H.S.Reall@damtp.cam.ac.uk, hvanelst@karlshochschule.de, baez@math.ucr.edu, geroch@uchicago.edu, b.j.carr@qmul.ac.uk, teta@mat.uniroma1.it, gfrellis@gmail.com, michael.eichmair@univie.ac.at, helfera@missouri.edu, schoen@math.stanford.edu, stefan.hollands@itp.uni-leipzig.de, hermann.nicolai@aei.mpg.de, helmut.friedrich@aei.mpg.de, c.isham@imperial.ac.uk, s.hartmann@lmu.de, charles.torre@usu.edu, kuchar@physics.utah.edu, hohanian@uvm.edu, giulini@itp.uni-hannover.de, psjcosmos@gmail.com, goswami@ukzn.ac.za, genzel@mpe.mpg.de, ghez@astro.ucla.edu, altecosmo20@gmail.com, enzo.salzano@gmail.com, tomasz.matulewicz@fuw.edu.pl, mariusz.dabrowski@usz.edu.pl, krzysztof.meissner@fuw.edu.pl, janusz.garecki@usz.edu.pl, andrzej.krolak@ncbj.gov.pl, info@copernicuscenter.edu.pl, grideoutjr@aol.com, lorenzo.iorio@libero.it, ecu2021@mdpi.com, antonio.padilla@nottingham.ac.uk, jinzwang@itp.phys.ethz.ch, lavinia@ethz.ch, nbeisert@itp.phys.ethz.ch, josemm.senovilla@ehu.es, matt.visser@msor.vuw.ac.nz, vpetkov@minkowskiinstitute.org, john.stachel@gmail.com, david_brown@ncsu.edu, hossi@fias.uni-frankfurt.de, vixra.org@gmail.com, damour@ihes.fr

Dear Dr. Wu,

Thank you for your feedback. It is by no means surprising that the talibans at arXiv.org rejected your fundamental article 'Gravitational Energy-momentum and Conservation of Energy-momentum in General Relativity',

<http://www.god-does-not-play-dice.net/ctp.pdf>

These talibans rejected my manuscript from 17 July 2005,

<http://www.god-does-not-play-dice.net/physics-0507133.htm>

Billions of US dollars and euros – all taxpayers' money – for the so-called "advanced" LIGO (app. 2B USD) and LISA Pathfinder (450M EUR) could have been saved, and Kip Thorne and his collaborators could not have the chance to fool us again and get the Nobel Prize in 2017. Fool me once, shame on you; fool me twice, shame on me. Check out the *facts* in

http://www.god-does-not-play-dice.net/T_V_S.jpg

http://www.god-does-not-play-dice.net/kip_slide_5.jpg

<http://www.god-does-not-play-dice.net/pulsar.jpg>

<http://www.god-does-not-play-dice.net/simmer.jpg>

Let me comment on your conclusion in your article (p. 29) at the first link above: "GR has been the most beautiful theory in physics, but it was messed by pseudotensors, non-localizability and gravitational energy-momentum which resides nowhere like a ghost."

We of course don't accept ghosts: please note an excerpt from p. 12 (attached) from my latest report at

<http://www.god-does-not-play-dice.net/quantum.pdf>

Details can be read at p. 23 (last) at the URL above.

Stay healthy and be happy, the fun part is just around the corner:-)

Best regards,

Dimi Chakalov
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p_12.jpg

Complicated? Let me try again. Suppose you have a **weighing scale** with two plates, and a bunch of identical apples. You place 4 apples on the left plate and 4 apples on the right plate, so that the scale is perfectly balanced and the difference between the two plates is “nullified”. Now try with 5 apples on the left plate and 5 apples on the right plate, and finally with 2 apples on the left plate and 2 apples on the right plate. The scale will be always perfectly balanced and the difference will be always “re-nullified”. But suppose you can look (with **light**) at only **one** of the plates: **you will see 2, 4, and 5 apples**, and will conclude that there is some **non-conservation** of apples, correct? Well, the answer is **JAIN**. I suggested last year the so-called evolution equation based on re-interpretation of “negative mass” (Eq. 1 in [wegtransformierbar.pdf](#)), and will be happy to explain all types of “**apples**” in it, once I see the paper at arXiv.org mentioned **above**.

Explanatory Note

To understand my email from 31.03.2021 and the core issue of [global Time](#), recall that it is impossible *in principle* to formulate the gravitational dynamics “near the singularity” (H. Nicolai, [arXiv:2104.09626](#)). I strongly suggest to study the essay by Hermann Nicolai (the ontological embedding of ‘nothing’ remains an open question, p. 2). Let me offer a simple illustration of the *metric paradox*, from p. 8 in [Platonic Theory of Spacetime](#).

Once we introduce metric of spacetime, as Hermann Minkowski did at his famous talk on [21 September 1908](#), we face the origin of spacetime, which must have existed *before** the instant of creating spacetime endowed with metric. This *metric paradox* prompted [Yakov Zeldovich](#) to say (private communication) that “long time ago, there was a brief period of time during which there was still no time at all.” He was, of course, joking.

I suggested the so-called vacuum cleaner paradox (VCP) along the deflation time toward the Beginning, from [Pink Panther](#): he used a super powerful vacuum cleaner to suck in the entire world, including himself, after which the vacuum cleaner sucked itself and disappeared into the blob of gray stuff below (known as “inflation”, [Slide 12](#) in [Quantum Spacetime](#)), with duration from 10^{-32} s to 10^{-36} s *toward* the Beginning [[John 1:1](#)]. Notice the doctrine of *trialism* (two *complementary* paths, from physics and from theology, leading to the same “trunk”). We use the path from theology, which is easier to explain.



**John
1:1**

It should be agonizingly clear that the Universe ([S. Hawking & G.F.R. Ellis](#)) does not and cannot have *any* description “near the singularity”, e.g., some sort of “[quantum soup](#)” or a hypothetical μ -vacuum ([Erast Gliner](#)). If it had, the “vacuum cleaner” will suck it as well, and then suck itself and totally disappear into the blob of gray stuff above, which cannot be described even [mathematically](#). The solution is [physical theology](#), in which God [[John 1:1](#)] is eternally residing both “inside” each and every consecutive 4D instant ‘here and now’ and “outside” the *physicalized* partition (dubbed “[jacket](#)”) of the Universe (**P**), ever since the Beginning. Read [Quantum of Spacetime: Zenon Connection](#) (25.04.2021, 26 pp.) and my one-page memo on [spacetime engineering](#) at [this http URL](#).

D. Chakalov
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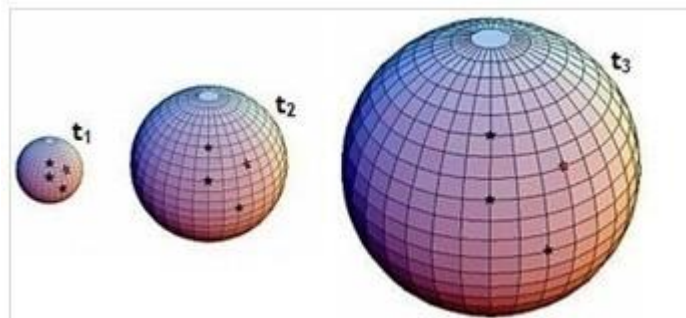
30 April 2021, 13:13 GMT

*The phenomenon called *causality* requires temporal (before → after) ordering of events. For example, when you look at the Sun, you see the state it had 500 sec earlier.



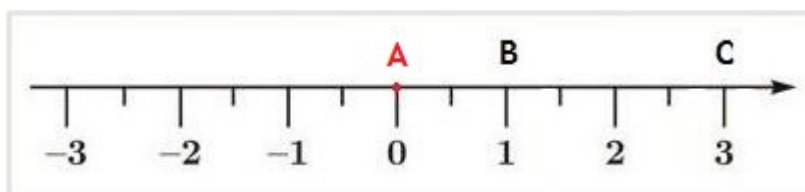
Denote your instant of observation with t_2 : you see the past state of the Sun at t_1 on your timeline at t_2 , namely, $t_2 - t_1 = 500$ sec. Also, at your instant t_2 the Sun has had a new state, which you will see at your timeline at t_3 , such that $t_3 - t_2 = t_2 - t_1 = 500$ sec. **NB:** The Sun *always* exists as ‘physical reality out there’, regardless if we see it or not.

Thus, we can define three consecutive instants along the *cosmological time*: $t_3 > t_2 > t_1$.



But the relativistic causality does *not* hold for Quantum Theory: read Erwin Schrödinger from 1935 at [this http URL](#). Moreover, if we use the current notion of causality to trace back the *origin* of spacetime, we will hit the *metric paradox* viz. VCP mentioned [above](#).

People are prone to ignore the **Platonic** origin of ‘time zero’. If we denote the latter with **A** and place it at the beginning of the positive numbers on the *real line* below, we can say that $(AC) - (AB) = (BC)$, hence the **Platonic** ‘time zero’ at **A** will “disappear”.



The Beginning at ‘time zero’ is **eternal** and *always present* [John 1:1], albeit *physically* hidden by the speed of light. Read about *biocausality* from January 1990 at pp. 17-19 in [Quantum of Spacetime: Zenon Connection](#), and my email from 21 April 2021 below.



Dimi Chakalov <dchakalov@gmail.com>

The origin of Time

Dimi Chakalov <dchakalov@gmail.com>

Wed, Apr 21, 2021 at 11:12 AM

To: Lotte <lterhaar@sisssa.it>, gerhardt@me.com, antonyv@clemson.edu, hubera@technikum-wien.at, pierre.vanhove@ipht.fr, katsuki.aoki@yukawa.kyoto-u.ac.jp, fenggezhang@hust.edu.cn, yggong@hust.edu.cn, jionglin@hust.edu.cn, louischou@hust.edu.cn, yz@bnu.edu.cn, nicolai@aei.mpg.de, sjcarlip@ucdavis.edu, jean-luc.lehners@aei.mpg.de, henneaux@ulb.ac.be, lsmolin@perimeterinstitute.ca, axel.kleinschmidt@aei.mpg.de, jacobson@umd.edu, joergf@maths.otago.ac.nz, vrovenski@univ.haifa.ac.il, yuyuetony@gmail.com, irod@princeton.edu, kiefer@thp.uni-koeln.de, may@math.uchicago.edu, lee@math.washington.edu, rendall@uni-mainz.de, deepthought@asu.edu, michal.p.heller@aei.mpg.de, gerhard.heinzel@aei.mpg.de, georgi.dvali@physik.uni-muenchen.de, andreas.doering@comlab.ox.ac.uk, erik@strangebeautiful.com, hand@chalmers.se, todd.oliynyk@monash.edu, jeremie.joudioux@aei.mpg.de, ettore.minguzzi@unifi.it, roland.steinbauer@univie.ac.at, wolfgang.reiter@univie.ac.at, klaus.schmidt@univie.ac.at, jakob.yngvason@univie.ac.at, michael.kunzinger@univie.ac.at, robert.beig@univie.ac.at, piotr.chrusciel@univie.ac.at, rteams@esi.ac.at, david.fajman@univie.ac.at, gary@physics.ucsb.edu, galloway@math.miami.edu, fermilab@fnal.gov, unruh@physics.ubc.ca, xzhang@amss.ac.cn, laan@aei.mpg.de, dmalamen@uci.edu, yraptis@central.ntua.gr, niall@ucc.ie, zhaoyanwu2000@yahoo.com, cmchen@phy.ncu.edu.tw, nester@phy.ncu.edu.tw, tod@maths.ox.ac.uk, seri@math.princeton.edu, H.S.Reall@damtp.cam.ac.uk, hvanelst@karlshochschule.de, baez@math.ucr.edu, geroch@uchicago.edu, b.j.carr@qmul.ac.uk, teta@mat.uniroma1.it, gfrellis@gmail.com, michael.eichmair@univie.ac.at, helfera@missouri.edu, schoen@math.stanford.edu, stefan.hollands@itp.uni-leipzig.de, hermann.nicolai@aei.mpg.de, helmut.friedrich@aei.mpg.de, c.isham@imperial.ac.uk, s.hartmann@lmu.de, charles.torre@usu.edu, kuchar@physics.utah.edu, hohanian@uvm.edu, giulini@itp.uni-hannover.de, psjcosmos@gmail.com, goswami@ukzn.ac.za, genzel@mpe.mpg.de, ghez@astro.ucla.edu, altecosmo20@gmail.com, enzo.salzano@gmail.com, tomasz.matulewicz@fuw.edu.pl, mariusz.dabrowski@usz.edu.pl, krzysztof.meissner@fuw.edu.pl, janusz.garecki@usz.edu.pl, andrzej.krolak@ncbj.gov.pl, info@copernicuscenter.edu.pl, grideoutjr@aol.com, lorenzo.iorio@libero.it, ecu2021@mdpi.com, antonio.padilla@nottingham.ac.uk, jinzwang@itp.phys.ethz.ch, lavinia@ethz.ch, nbeisert@itp.phys.ethz.ch, josemm.senovilla@ehu.es, matt.visser@msor.vuw.ac.nz, vpetkov@minkowskiinstitute.org, john.stachel@gmail.com, david_brown@ncsu.edu, hossi@fias.uni-frankfurt.de, damour@ihes.fr, marcela.cardenas@usach.cl, francisco.correa@uach.cl, kristiansen.lara@usach.cl, miguel.pino.r@usach.cl

Ladies and Gentlemen:

It is agonizingly clear that one cannot (i) introduce some scalar field (chronon) to play the role of some preferred time by selecting a preferred manifold slicing, and (ii) reformulate the gravitational dynamics "near the singularity" (H. Nicolai, pp. 3-5 in arXiv:2104.09626v1 [gr-qc]). See for example the jabberwocky by R. Penrose from 1963 at

http://www.god-does-not-play-dice.net/Frauendiener_Penrose.jpg

Read my report on the *quantum of spacetime* at <http://www.god-does-not-play-dice.net/quantum.pdf> (26 pages + illustrations)

Regarding GR, check out also

<http://www.god-does-not-play-dice.net/p7.jpg>
<http://www.god-does-not-play-dice.net/questions.jpg>
<http://www.god-does-not-play-dice.net/apples.jpg>
<http://www.god-does-not-play-dice.net/Volta.pdf>
(1 page + illustration)

Speaking of gravity: how about GWs?

http://www.god-does-not-play-dice.net/T_V_S.jpg
http://www.god-does-not-play-dice.net/kip_slide_5.jpg
<http://www.god-does-not-play-dice.net/pulsar.jpg>

<http://www.god-does-not-play-dice.net/LIGO.jpg>
<http://www.god-does-not-play-dice.net/simmer.jpg>
<http://www.god-does-not-play-dice.net/Wu.pdf>

Yours sincerely,

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Re: Thank you

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Fri, May 14, 2021 at 3:29 AM

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P.S. I will mention your insights in my forthcoming book 'The Physics of Life',

<http://www.god-does-not-play-dice.net/Intro.pdf>

Thank you for your invaluable (albeit unintended) support.

D.C.

On Wed, Mar 31, 2021 at 1:52 PM, Dimi Chakalov <dchakalov@gmail.com> wrote:

[snip]