



Dimi Chakalov &lt;dchakalov@gmail.com&gt;

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**Claus Kiefer, Quantum Gravity, 2nd ed., 2007**

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Dimi Chakalov &lt;dchakalov@gmail.com&gt;

Sat, Aug 12, 2023 at 1:15 PM

To: Claus Lämmerzahl <claus.laemmerzahl@zarm.uni-bremen.de>, Wojciech Hubert Zurek <whzurek@gmail.com>, Norbert Straumann <norbert.straumann@gmail.com>, Jerzy Kowalski-Glikman <jerzy.kowalski-glikman@ift.uni.wroc.pl>, Maximilian Schlosshauer <schlossh@up.edu>, Hartmann Römer <hartmann.roemer@physik.uni-freiburg.de>, William Unruh <unruh@physics.ubc.ca>, Carlo Rovelli <rovelli.carlo@gmail.com>, Elke Müller <elke.mueller@aei.mpg.de>, Benjamin Knispel <benjamin.knispel@aei.mpg.de>, helfera@missouri.edu, gary@physics.ucsb.edu, pollack@uw.edu, baez@math.ucr.edu, piotr.chrusciel@univie.ac.at, zhaoyanwu2000@yahoo.com, charles.torre@usu.edu, erik@strangebeautiful.com, rteams@esi.ac.at, galloway@math.miami.edu, laan@aei.mpg.de, dmalaman@uci.edu, tod@maths.ox.ac.uk, H.S.Reall@damtp.cam.ac.uk, hvanelst@karlshochschule.de, jacobson@umd.edu, joergf@maths.otago.ac.nz, hohanian@uvm.edu, domenico.giulini@itp.uni-hannover.de  
Cc: kiefer@thp.uni-koeln.de

On p. 319, Claus Kiefer wrote: "The primordial gravitons would manifest themselves in a stochastic background of gravitational waves, which could probably be observed with the space-borne interferometer LISA to be launched in a couple of years. Its observation would constitute a direct test of linearized quantum gravity."

When Hell freezes,

<https://chakalov.net/GWP.pdf>

[https://chakalov.net/pp\\_18\\_20.jpg](https://chakalov.net/pp_18_20.jpg)

And on p. 320, he wrote: "The expansion of the universe is distinguished because it does not refer to a class of phenomena; it is a single process. It has, therefore, been suggested that it is the common root for all other arrows of time — the 'master arrow'."

First, you need math:

<https://chakalov.net/canvas.pdf>

Unless of course you are Ruzzians,

<https://www.god-does-not-play-dice.net/9.jpg>

D. Chakalov  
[chakalov.net](https://chakalov.net)



Dimi Chakalov &lt;dchakalov@gmail.com&gt;

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**Re: Gravitational Wave Parapsychology**

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Dimi Chakalov &lt;dchakalov@gmail.com&gt;

Fri, Jul 28, 2023 at 10:40 PM

To: Zhaoyan Wu &lt;zhaoyanwu2000@yahoo.com&gt;

Cc: jwang\_astro@pku.edu.cn, rwangkiaa@pku.edu.cn, xian.chen@pku.edu.cn, dongsubo@pku.edu.cn, lho.pku@gmail.com, fangzhou.jiang@gmail.com, kjlee007@gmail.com, lxl@pku.edu.cn, fkliu@pku.edu.cn, yjpeng@pku.edu.cn, kwang.astro@pku.edu.cn, lilew@pku.edu.cn, wuxb@pku.edu.cn, r.x.xu@pku.edu.cn, yuqj@pku.edu.cn, chenbac@nao.cas.cn, haol@shao.ac.cn, xhliao@shao.ac.cn, shao@shao.ac.cn, ccliu@math.columbia.edu, xzhang@amss.ac.cn, mtwang@math.columbia.edu, danreed@nsf.gov, vmccrary@nsf.gov, sastern@nsf.gov, afs@astro.caltech.edu, malkan@astro.ucla.edu, hwilson@utep.edu, jplozai@nsf.gov, dzannino@nsf.gov, linhu@associates.nsf.gov, jveysey@nsf.gov, emoran@nsf.gov, nlymn@nsf.gov, schoen@stanford.edu, rovelli@cpt.univ-mrs.fr, helfera@missouri.edu, gary@physics.ucsb.edu, pollack@uw.edu, baez@math.ucr.edu, piotr.chrusciel@univie.ac.at, beta-nsf-feedback@nsf.gov, info@nsf.gov, valerie.connaughton@nasa.gov, pgarnavi@nd.edu, woodw024@umn.edu, sven@uoguelph.ca, soker@physics.technion.ac.il, fozel@arizona.edu, avikhlinin@head.cfa.harvard.edu, mwb@space.mit.edu, stefan.m.immler@nasa.gov, dominic.benford@nasa.gov, thomas.hams-1@nasa.gov, brad.cenko@nasa.gov, elizabeth.a.pumphrey@nasa.gov, peterm@stanford.edu, lorella.angelini-1@nasa.gov, persis@stanford.edu, julio@star.le.ac.uk, hanna@physics.mcgill.ca, mario.perez@nasa.gov, hdieter@clemsn.edu, frank.marshall@nasa.gov, siegel@swift.psu.edu, mjp@mssl.ucl.ac.uk, gianpiero.tagliaferri@brera.inaf.it, bcarpenter@nasa.gov, devon.w.griffin@nasa.gov, giommi@asi.it, william.b.latter@nasa.gov, kevin.y.sato@nasa.gov, patricia.m.knezek@nasa.gov, bruce.a.tagg@nasa.gov, HQ-FINESST@mail.nasa.gov, community@space.com, rana@caltech.edu, barry.barish@ligo.org, weiss@ligo.mit.edu, kip@caltech.edu, cmw@phys.ufl.edu

Zhaoyan Wu wrote: "Particularly, in GR, the metric field  $g$  contains all geometric information of the spacetime. (...) The name we call metric field of spacetime "gravitational field" sounds as if it's a force field, not non-material. But spacetime metric field does not exchange energy-momentum with matter particles and matter fields. We say it does not carry energy-momentum. In physics, force or interaction always means exchange of energy-momentum. The so-called gravitational field (actually the metric field of spacetime) is not a force field, and gravity is not a natural force."

Zhaoyan, what you wrote above is IRRELEVANT to the issue of \*gravitational radiation\* (forget the fake GWs). Why? Because The spacetime \*itself\* is evolving: read Q4/A4 at p. 19 in <https://chakalov.net/GWP.pdf>

It's a whole new ball game.

Yes, we can make gravity a natural force, but only with the Fifth Force along the arrow of Time.

Details in <https://chakalov.net/waves.pdf>

Dimi Chakalov  
[chakalov.net](https://chakalov.net)

[Quoted text hidden]



Dimi Chakalov &lt;dchakalov@gmail.com&gt;

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## Gravitational Wave Parapsychology

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Dimi Chakalov &lt;dchakalov@gmail.com&gt;

Sun, Jun 18, 2023 at 2:30 PM

To: jwang\_astro@pku.edu.cn, rwangkiaa@pku.edu.cn, xian.chen@pku.edu.cn, dongsubo@pku.edu.cn, lho.pku@gmail.com, fangzhou.jiang@gmail.com, kjlee007@gmail.com, lxl@pku.edu.cn, fkliu@pku.edu.cn, yjpeng@pku.edu.cn, kwang.astro@pku.edu.cn, lilew@pku.edu.cn, wuxb@pku.edu.cn, r.x.xu@pku.edu.cn, yuqj@pku.edu.cn, chenbac@nao.cas.cn, haol@shao.ac.cn, xhliao@shao.ac.cn, shao@shao.ac.cn, ccliu@math.columbia.edu, zhaoyanwu2000@yahoo.com, xzhang@amss.ac.cn, mtwang@math.columbia.edu

Dear Colleagues,

Please read Gravitational Wave Parapsychology at

<https://chakalov.net/GWP.pdf>

<https://chakalov.net/Kip.pdf>

机不可失，失不再来。

Kind regards,

Dimi Chakalov

[chakalov.net](https://chakalov.net)



Dimi Chakalov &lt;dchakalov@gmail.com&gt;

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## Can you detect pink unicorns dancing with red herrings?

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Dimi Chakalov &lt;dchakalov@gmail.com&gt;

Thu, Jun 15, 2023 at 11:08 AM

To: Kip Thorne &lt;kip@caltech.edu&gt;

Cc: Daniel A Reed <danreed@nsf.gov>, Victor R McCrary <vmccrary@nsf.gov>, Alan Stern <sastern@nsf.gov>, Anneila Sargent <afs@astro.caltech.edu>, Matthew Malkan <malkan@astro.ucla.edu>, Heather Wilson <hwilson@utep.edu>, jplozai@nsf.gov, dzannino@nsf.gov, linhu@associates.nsf.gov, jveysey@nsf.gov, emoran@nsf.gov, nlymn@nsf.gov, beta-nsf-feedback@nsf.gov, info@nsf.gov, valerie.connaughton@nasa.gov, pgarnavi@nd.edu, woodw024@umn.edu, sven@uoguelph.ca, soker@physics.technion.ac.il, fozel@arizona.edu, avikhlinin@head.cfa.harvard.edu, mwb@space.mit.edu, stefan.m.immler@nasa.gov, dominic.benford@nasa.gov, thomas.hams-1@nasa.gov, brad.cenko@nasa.gov, elizabeth.a.pumphrey@nasa.gov, peterm@stanford.edu, lorella.angelini-1@nasa.gov, persis@stanford.edu, julio@star.le.ac.uk, hanna@physics.mcgill.ca, mario.perez@nasa.gov, hdieter@clemson.edu, frank.marshall@nasa.gov, siegel@swift.psu.edu, mjp@mssl.ucl.ac.uk, gianpiero.tagliaferri@brera.inaf.it, bcarpenter@nasa.gov, devon.w.griffin@nasa.gov, giommi@asi.it, william.b.latter@nasa.gov, kevin.y.sato@nasa.gov, patricia.m.knezek@nasa.gov, bruce.a.tagg@nasa.gov, HQ-FINESST@mail.nasa.gov, community@space.com, rana@caltech.edu, barry.barish@ligo.org, weiss@ligo.mit.edu

Kip:

Read closely 'Gravitational Wave Parapsychology' at  
<https://chakalov.net/GWP.pdf>  
(14 June 2023, 10 pages)

I discussed on p. 3 your "GW event" on 17 August 2017:  
<https://chakalov.net/Nancy.pdf>

Sec. 5, Summary and conclusion at  
[https://chakalov.net/Sec\\_5.jpg](https://chakalov.net/Sec_5.jpg)

I didn't mention Rainer Weiss, because I do believe he is an honest person and was totally unaware of your "blind injections" on 14 September 2015 mentioned at the link above.

By the end of 2023, there will be an enormous scandal about the fake GW150914. I trust you and Barry Barish will be alive and well to explain how you managed to detect pink unicorns dancing with red herrings on 14 September 2015. I will be happy to help you.

D. Chakalov  
[chakalov.net](https://chakalov.net)



Dimi Chakalov &lt;dchakalov@gmail.com&gt;

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**Re: STOP funding LIGO!**

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Dimi Chakalov &lt;dchakalov@gmail.com&gt;

Sat, Jun 3, 2023 at 8:07 PM

To: Daniel A Reed <danreed@nsf.gov>, Victor R McCrary <vmccrary@nsf.gov>, Alan Stern <sastern@nsf.gov>, Anneila Sargent <afs@astro.caltech.edu>, Matthew Malkan <malkan@astro.ucla.edu>, Heather Wilson <hwilson@utep.edu>, jplozai@nsf.gov, dzannino@nsf.gov, linhu@associates.nsf.gov, jveysey@nsf.gov, emoran@nsf.gov, nlymn@nsf.gov, beta-nsf-feedback@nsf.gov, info@nsf.gov

Cc: valerie.connaughton@nasa.gov, pgarnavi@nd.edu, woodw024@umn.edu, sven@uoguelph.ca, soker@physics.technion.ac.il, fozel@arizona.edu, avikhlinin@head.cfa.harvard.edu, mwb@space.mit.edu, stefan.mimmler@nasa.gov, dominic.benford@nasa.gov, thomas.hams-1@nasa.gov, brad.cenko@nasa.gov, elizabeth.a.pumphrey@nasa.gov, peterm@stanford.edu, lorella.angelini-1@nasa.gov, persis@stanford.edu, julio@star.le.ac.uk, hanna@physics.mcgill.ca, mario.perez@nasa.gov, hdieter@clemsion.edu, frank.marshall@nasa.gov, siegel@swift.psu.edu, mjp@mssl.ucl.ac.uk, gianpiero.tagliaferri@brera.inaf.it, bcarpenter@nasa.gov, devon.w.griffin@nasa.gov, giommi@asi.it, william.b.latter@nasa.gov, kevin.y.sato@nasa.gov, patricia.m.knezek@nasa.gov, bruce.a.tagg@nasa.gov, HQ-FINESST@mail.nasa.gov, community@space.com

P.S. Read 'Gravitational Wave Parapsychology' (GWP.pdf) at  
<https://chakalov.net/GWP.pdf>

STOP funding LIGO !

D. Chakalov  
[chakalov.net](https://chakalov.net)

On Sun, Aug 14, 2022 at 12:56 AM, Dimi Chakalov <dchakalov@gmail.com> wrote:

>  
> Ladies and Gentlemen:  
> You support LIGO. Don't.  
[snip]



Dimi Chakalov &lt;dchakalov@gmail.com&gt;

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**Re: Puzzle**

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Dimi Chakalov &lt;dchakalov@gmail.com&gt;

Sat, Jun 3, 2023 at 1:53 PM

To: schoen@stanford.edu, rovelli@cpt.univ-mrs.fr, helfera@missouri.edu, gary@physics.ucsb.edu, piotr.chrusciel@univie.ac.at, pollack@uw.edu, zhaoyanwu2000@yahoo.com, baez@math.ucr.edu  
Cc: thomas.thiemann@gravity.fau.de, lhe31@jhu.edu, jluk@stanford.edu, tiemblo@imaff.cfmac.csic.es, demetri.christodoulou@math.ethz.ch, zhangjy9610@vip.qq.com, lindblad@math.jhu.edu, irod@princeton.edu, christopherjkauffman@gmail.com, dan.ginsberg@gmail.com, seri@math.princeton.edu, misi@flatironinstitute.org, will.farr@stonybrook.edu, bailey.sykes@monash.edu, alex.jenkins@ucl.ac.uk, aditya.vijaykumar@icts.res.in, kaloper@physics.ucdavis.edu, huyiming@mail.sysu.edu.cn, mairi.sakellariadou@kcl.ac.uk, yo@thp.uni-koeln.de, gaztanaga@gmail.com, korol@star.sr.bham.ac.uk, andrea.valle@unito.it, hubsch@howard.edu, vivian.i.sabla.gr@dartmouth.edu, maciek.wielgus@gmail.com, debora.lancova@fpf.slu.cz, s.pereira@unesp.br, amvfisico@gmail.com, jf.jesus@unesp.br, holandarfl@fisica.ufrn.br, zs8479@princeton.edu, rita.t.costa@princeton.edu, cr4482@princeton.edu, egiorgi@princeton.edu, fpretori@princeton.edu, yshlapen@princeton.edu, dafermos@math.princeton.edu, burrows@astro.princeton.edu, sgiombi@princeton.edu, jeremy@astro.princeton.edu, aionescu@math.princeton.edu, klebanov@princeton.edu, quataert@princeton.edu, anatoly@princeton.edu, verlinde@princeton.edu, steinh@princeton.edu, jstone@astro.princeton.edu, hansr@kth.se, hand@chalmers.se, todd.oliynyk@monash.edu, jeremie.joudioux@aei.mpg.de, ettore.minguzzi@unifi.it, carlip@physics.ucdavis.edu, macdonal@luther.edu, yraptis@central.ntua.gr, piotr.chrusciel@univie.ac.at, florian.bonell@univie.ac.at, david.fajman@univie.ac.at, thomas.mieling@univie.ac.at, maximilian.ofner@univie.ac.at, mateja.gosenca@univie.ac.at, stefan.palenta@univie.ac.at, f.steiner@univie.ac.at, svozil@tuwien.ac.at, michele.maggiore@unige.ch, zhaoyanwu2000@yahoo.com, norbert.straumann@gmail.com, jacobson@umd.edu, joergf@maths.otago.ac.nz, vrovenski@univ.haifa.ac.il, yuyuetony@gmail.com, depththought@asu.edu, michal.p.heller@aei.mpg.de, gerhard.heinzel@aei.mpg.de, georgi.dvali@physik.uni-muenchen.de, andreas.doering@fau.de, erik@strangebeautiful.com, rteams@esi.ac.at, galloway@math.miami.edu, laan@aei.mpg.de, dmalamen@uci.edu, cmchen@phy.ncu.edu.tw, nester@phy.ncu.edu.tw, tod@maths.ox.ac.uk, 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, stefan.hollands@itp.uni-leipzig.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, pollack@uw.edu, psjcosmos@gmail.com, goswami@ukzn.ac.za, genzel@mpe.mpg.de, unruh@physics.ubc.ca, xzhang@amss.ac.cn, janusz.garecki@usz.edu.pl, info@copernicuscenter.edu.pl, grideoutjr@aol.com, josemm.senovilla@ehu.es, matt.visser@msor.vuw.ac.nz, vpetkov@minkowskiinstitute.org, john.stachel@gmail.com, david\_brown@ncsu.edu, damour@ihes.fr, landsman@math.ru.nl, johnmlee@uw.edu, mtwang@math.columbia.edu, patrick-duerr@gmx.de, gpe@ast.cam.ac.uk, mph@mrao.cam.ac.uk, a.n.lasenby@mrao.cam.ac.uk, FGS@weizmann.ac.il

P.S. If it is too difficult for you to examine the puzzle of positive mass, try my latest report 'Gravitational Wave Parapsychology' (GWP.pdf) at

<https://chakalov.net/GWP.pdf>

I extend this offer to all your colleagues. Good luck.

D.C.

On Thu, May 25, 2023 at 11:25 AM, Dimi Chakalov <dchakalov@gmail.com> wrote:

[https://chakalov.net/GR\\_time.pdf](https://chakalov.net/GR_time.pdf)



Dimi Chakalov <dchakalov@gmail.com>

## Re: Puzzle

Dimi Chakalov <dchakalov@gmail.com>

Thu, May 25, 2023 at 11:25 AM

To: schoen@stanford.edu, rovelli@cpt.univ-mrs.fr, helfera@missouri.edu, gary@physics.ucsb.edu, pollack@uw.edu, zhaoyanwu2000@yahoo.com, baez@math.ucr.edu, piotr.chrusciel@univie.ac.at

Dear colleagues,

I trust you can write up an article about the positive mass

[https://chakalov.net/Schoen\\_Yau\\_1979.jpg](https://chakalov.net/Schoen_Yau_1979.jpg)

and the non-metrical "time" in GR

[https://chakalov.net/Rovelli\\_p84.jpg](https://chakalov.net/Rovelli_p84.jpg) ,

which perhaps facilitates the atemporal 'hadshaking' along null intervals (attached).

With scrupulous intellectual honesty, as you always do.

All the best,

Dimi

On Wed, May 24, 2023 at 1:08 PM, Dimi Chakalov <dchakalov@gmail.com> wrote:

[snip]

F. Hoyle and J. V. Narlikar, *Cosmology and action-at-a-distance electrodynamics*. *Rev. Mod. Phys.* **67** (1995) 113-155.

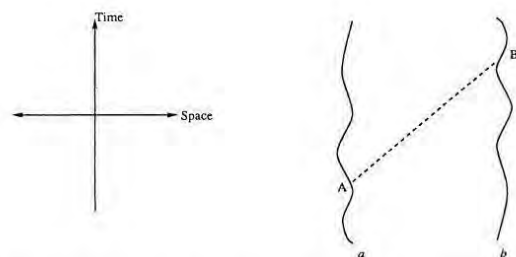


FIG. 1. Typical points  $A$  (on the worldline of charge  $a$ ) and  $B$  (on the worldline of charge  $b$ ) interact if the dotted line connecting them is a null ray. However, the interaction can be both forward ( $A$  to  $B$ ) and backward ( $B$  to  $A$ ) in time.

Excerpts from *THE ORIGIN OF INERTIA* by James F. Woodward, 1998

3. When you push on an object a gravitational disturbance goes propagating off into either the past or the future. Out there in the past or future the disturbance makes the distant matter in the universe wiggle. The wiggling stuff out there makes up the currents that cause disturbances to propagate from the past or the future back to the object. They all arrive from the past or future just in time to produce the inertial reaction force you feel.

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Waves that move backward in time are called "advanced" waves because their "effects" in the past occur in advance of their "causes" in the future.

--  
Precisely the same thing evidently happens with inertial reaction forces. The act of pushing on something causes a disturbance in the gravitational field to go propagating off into the future. It makes stuff (the "absorber") out there wiggle. When the stuff wiggles it sends disturbances backward (and forward) in time. All the backward traveling disturbances converge on what we're pushing and generate the inertial reaction force we feel. No physical law is violated in any of this. And nothing moves faster than the speed of light. It only seems so because of the advanced waves traveling at the speed of light in the backward time direction.





Dimi Chakalov &lt;dchakalov@gmail.com&gt;

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## Puzzle

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Dimi Chakalov &lt;dchakalov@gmail.com&gt;

Wed, May 24, 2023 at 1:08 PM

To: rovelli@cpt.univ-mrs.fr, lhe31@jhu.edu, jluk@stanford.edu, tiemblo@imaff.cfmac.csic.es, demetri.christodoulou@math.ethz.ch, zhangjy9610@vip.qq.com, lindblad@math.jhu.edu, irod@princeton.edu, christopherjkauffman@gmail.com, dan.ginsberg@gmail.com, seri@math.princeton.edu, misi@flatironinstitute.org, will.farr@stonybrook.edu, bailey.sykes@monash.edu, alex.jenkins@ucl.ac.uk, aditya.vijaykumar@icts.res.in, kaloper@physics.ucdavis.edu, huyiming@mail.sysu.edu.cn, mairi.sakellariadou@kcl.ac.uk, yo@thp.uni-koeln.de, gaztanaga@gmail.com, korol@star.sr.bham.ac.uk, andrea.valle@unito.it, hubsch@howard.edu, vivian.i.sabla.gr@dartmouth.edu, maciek.wielgus@gmail.com, debora.lancova@fpf.slu.cz, s.pereira@unesp.br, amvfisico@gmail.com, jf.jesus@unesp.br, holandarfl@fisica.ufrn.br, zs8479@princeton.edu, rita.t.costa@princeton.edu, cr4482@princeton.edu, egiorgi@princeton.edu, fpretori@princeton.edu, yshlapen@princeton.edu, dafermos@math.princeton.edu, burrows@astro.princeton.edu, sgiombi@princeton.edu, jeremy@astro.princeton.edu, aionescu@math.princeton.edu, klebanov@princeton.edu, quataert@princeton.edu, anatoly@princeton.edu, verlinde@princeton.edu, steinh@princeton.edu, jstone@astro.princeton.edu, hansr@kth.se, hand@chalmers.se, todd.olinyk@monash.edu, jeremie.joudioux@aei.mpg.de, ettore.minguzzi@unifi.it, carlip@physics.ucdavis.edu, macdonal@luther.edu, yraptis@central.ntua.gr, anastop@physics.upatras.gr, piotr.chrusciel@univie.ac.at, florian.bonell@univie.ac.at, david.fajman@univie.ac.at, thomas.mieling@univie.ac.at, maximilian.ofner@univie.ac.at, mateja.gosenca@univie.ac.at, stefan.palenta@univie.ac.at, f.steining@univie.ac.at, svozil@tuwien.ac.at, michele.maggiore@unige.ch, zhaoyanwu2000@yahoo.com, norbert.straumann@gmail.com, jacobson@umd.edu, joergf@maths.otago.ac.nz, vrovenski@univ.haifa.ac.il, yuyuetony@gmail.com, deepthought@asu.edu, michal.p.heller@aei.mpg.de, gerhard.heinzel@aei.mpg.de, georgi.dvali@physik.uni-muenchen.de, andreas.doering@fau.de, erik@strangebeautiful.com, rteams@esi.ac.at, gary@physics.ucsb.edu, galloway@math.miami.edu, dmalaman@uci.edu, cmchen@phy.ncu.edu.tw, nester@phy.ncu.edu.tw, tod@maths.ox.ac.uk, 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, helfera@missouri.edu, schoen@math.stanford.edu, stefan.hollands@itp.uni-leipzig.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, pollack@uw.edu, psjcosmos@gmail.com, goswami@ukzn.ac.za, genzel@mpe.mpg.de, unruh@physics.ubc.ca, xzhang@amss.ac.cn, janusz.garecki@usz.edu.pl, info@copernicuscenter.edu.pl, grideoutjr@aol.com, josemm.senovilla@ehu.es, matt.visser@msor.vuw.ac.nz, vpetkov@minkowskiinstitute.org, john.stachel@gmail.com, david\_brown@ncsu.edu, damour@ihes.fr, landsman@math.ru.nl, johnmlee@uw.edu, mtwang@math.columbia.edu, patrick-duerr@gmx.de, gpe@ast.cam.ac.uk, mph@mrao.cam.ac.uk, a.n.lasenby@mrao.cam.ac.uk, schoen@stanford.edu, rschoen@uci.edu, FGS@weizmann.ac.il

[https://chakalov.net/Schoen\\_Yau\\_1979.jpg](https://chakalov.net/Schoen_Yau_1979.jpg)

Good luck.

D. Chakalov

<https://chakalov.net/book.pdf>





Dimi Chakalov &lt;dchakalov@gmail.com&gt;

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**"It's casting pearls to the swine", G. 't Hooft**

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Dimi Chakalov &lt;dchakalov@gmail.com&gt;

Fri, Feb 10, 2023 at 4:07 AM

To: Gerardus &lt;g.thoof@uu.nl&gt;, a.ligtenberg1@uu.nl

Cc: stefan.nobbenhuis@nl.abnamro.com, n.groenenboom@uu.nl, daniele.malafarina@nu.edu.kz, larry.ford@tufts.edu, rovelli@cpt.univ-mrs.fr, lhe31@jhu.edu, jluk@stanford.edu, tiemblo@imaff.cfmac.csic.es, demetri.christodoulou@math.ethz.ch, zhangjy9610@vip.qq.com, lindblad@math.jhu.edu, irod@princeton.edu, christopherjkauffman@gmail.com, dan.ginsberg@gmail.com, seri@math.princeton.edu, misi@flatironinstitute.org, will.farr@stonybrook.edu, bailey.sykes@monash.edu, alex.jenkins@ucl.ac.uk, aditya.vijaykumar@icts.res.in, kaloper@physics.ucdavis.edu, huyiming@mail.sysu.edu.cn, mairi.sakellariadou@kcl.ac.uk, yo@thp.uni-koeln.de, gaztanaga@gmail.com, korol@star.sr.bham.ac.uk, andrea.valle@unito.it, hubsch@howard.edu, vivian.i.sabla.gr@dartmouth.edu, maciek.wielgus@gmail.com, debora.lancova@fpf.slu.cz, s.pereira@unesp.br, amvfisico@gmail.com, jf.jesus@unesp.br, holandarfl@fisica.ufrn.br, zs8479@princeton.edu, rita.t.costa@princeton.edu, cr4482@princeton.edu, egiorgi@princeton.edu, fpretori@princeton.edu, yshlapen@princeton.edu, dafermos@math.princeton.edu, burrows@astro.princeton.edu, sgiombi@princeton.edu, jeremy@astro.princeton.edu, aionescu@math.princeton.edu, klebanov@princeton.edu, quataert@princeton.edu, anatoly@princeton.edu, verlinde@princeton.edu, steinh@princeton.edu, jstone@astro.princeton.edu, hansr@kth.se, hand@chalmers.se, todd.oliynyk@monash.edu, jeremie.joudioux@aei.mpg.de, ettore.minguzzi@unifi.it, carlip@physics.ucdavis.edu, macdonal@luther.edu, yraptis@central.ntua.gr, anastop@physics.upatras.gr, piotr.chrusciel@univie.ac.at, florian.bonell@univie.ac.at, david.fajman@univie.ac.at, thomas.mieling@univie.ac.at, maximilian.ofner@univie.ac.at, mateja.gosenca@univie.ac.at, stefan.palenta@univie.ac.at, f.steiner@univie.ac.at, svozil@tuwien.ac.at, michele.maggiore@unige.ch, zhaoyanwu2000@yahoo.com, norbert.straumann@gmail.com, jacobson@umd.edu, joergf@maths.otago.ac.nz, vrovenski@univ.haifa.ac.il, yuyuetony@gmail.com, deepthought@asu.edu, michal.p.heller@aei.mpg.de, gerhard.heinzel@aei.mpg.de, georgi.dvali@physik.uni-muenchen.de, andreas.doering@fau.de, erik@strangebeautiful.com, rteams@esi.ac.at, gary@physics.ucsb.edu, galloway@math.miami.edu, dmalaman@uci.edu, cmchen@phy.ncu.edu.tw, nester@phy.ncu.edu.tw, tod@maths.ox.ac.uk, 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, helfera@missouri.edu, schoen@math.stanford.edu, stefan.hollands@itp.uni-leipzig.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, pollack@uw.edu, psjcosmos@gmail.com, goswami@ukzn.ac.za, genzel@mpe.mpg.de, unruh@physics.ubc.ca, xzhang@amss.ac.cn, janusz.garecki@usz.edu.pl, info@copernicuscenter.edu.pl, grideoutjr@aol.com, josemm.senovilla@ehu.es, matt.visser@msor.vuw.ac.nz, vpetkov@minkowskiinstitute.org, john.stachel@gmail.com, david\_brown@ncsu.edu, damour@ihes.fr, landsman@math.ru.nl, johnmlee@uw.edu, mtwang@math.columbia.edu, patrick-duerr@gmx.de, gpe@ast.cam.ac.uk, mph@mrao.cam.ac.uk, a.n.lasenby@mrao.cam.ac.uk, FGS@weizmann.ac.il

Gerardus:

A few years ago, you wrote a long web page 'STRANGE MISCONCEPTIONS OF GENERAL RELATIVITY', which is still at [https://webspacescience.uu.nl/~hooft101/gravitating\\_misconceptions.html](https://webspacescience.uu.nl/~hooft101/gravitating_misconceptions.html)

You abbreviated my name to 'DC', and explained your tantalizing idea to "split the metric" into a background part, for which you could take flat spacetime, and a "dynamical part". And then "one finds that the dynamical part of the metric indeed carries energy and momentum, just as one expects in a gravitational field. (...) In spite of DC calling it "utter madness", this procedure works just perfectly."

Your idea is indeed an utter madness. It is a diagnose of your "understanding" of GR, demonstrated recently in your arXiv:2211.10723 [gr-qc].

You never responded to the objections by Angelo Loinger to those "black holes", and bluntly stated: "It's casting pearls to the swine". Typical Russian reaction.

Regarding the mythical "black holes", I invite you to read pp. 5-6 in <https://chakalov.net/Force.pdf>

My theory is falsifiable, so you are also invited to prove it false by suggesting your solutions to the two puzzles, (i) and (ii), explained on p. 3 at the link above.

NB: Show me your "pearls", Gerardus. Don't be shy. Make your best shot.

Given your advanced age, you may find the issues of "black holes" too difficult -- feel free to ask your colleagues to help you. Good luck to you all.

DC



Dimi Chakalov &lt;dchakalov@gmail.com&gt;

## Unlimited clean energy from modified gravity

Dimi Chakalov &lt;dchakalov@gmail.com&gt;

Wed, Oct 26, 2022 at 5:58 PM

To: lhc31@jhu.edu, jluk@stanford.edu, demetri.christodoulou@math.ethz.ch, zhangjy9610@vip.qq.com, lindblad@math.jhu.edu, irod@princeton.edu, christopherjkauffman@gmail.com, dan.ginsberg@gmail.com, seri@math.princeton.edu, misi@flatironinstitute.org, will.farr@stonybrook.edu, bailey.sykes@monash.edu, alex.jenkins@ucl.ac.uk, aditya.vijaykumar@icts.res.in, kaloper@physics.ucdavis.edu, huyiming@mail.sysu.edu.cn, mairi.sakellariadou@kcl.ac.uk, yo@thp.uni-koeln.de, gaztanaga@gmail.com, korol@star.srbham.ac.uk, andrea.valle@unito.it, hubsch@howard.edu, vivian.i.sabla.gr@dartmouth.edu, maciek.wielgus@gmail.com, debora.lancova@pf.slu.cz, s.pereira@unesp.br, amvfisico@gmail.com, jf.jesus@unesp.br, holandarfl@fisica.ufrn.br, zs8479@princeton.edu, rita.t.costa@princeton.edu, cr4482@princeton.edu, egiorgi@princeton.edu, fpretori@princeton.edu, yshlapen@princeton.edu, dafermos@math.princeton.edu, burrows@astro.princeton.edu, sgiombi@princeton.edu, jeremy@astro.princeton.edu, aionescu@math.princeton.edu, klebanov@princeton.edu, quataert@princeton.edu, anatoly@princeton.edu, verlinde@princeton.edu, steinh@princeton.edu, jstone@astro.princeton.edu, hansr@kth.se, hand@chalmers.se, todd.oliynyk@monash.edu, jeremie.joudioux@aei.mpg.de, ettore.minguzzi@unifi.it, carlip@physics.ucdavis.edu, macdonal@luther.edu, yraptis@central.ntua.gr, anastop@physics.upatras.gr, piotr.chrusciel@univie.ac.at, florian.bonell@univie.ac.at, david.fajman@univie.ac.at, thomas.mieling@univie.ac.at, maximilian.ofner@univie.ac.at, mateja.gosenca@univie.ac.at, stefan.palenta@univie.ac.at, f.steiningger@univie.ac.at, svozil@tuwien.ac.at, michele.maggiore@unige.ch, zhaoyanwu2000@yahoo.com, norbert.straumann@gmail.com, jacobson@umd.edu, joergf@maths.otago.ac.nz, vrovenski@univ.haifa.ac.il, yuyuetony@gmail.com, deepthought@asu.edu, michal.p.heller@aei.mpg.de, gerhard.heinzel@aei.mpg.de, georgi.dvali@physik.uni-muenchen.de, andreas.doering@fau.de, erik@strangebeautiful.com, rteams@esi.ac.at, gary@physics.ucsb.edu, galloway@math.miami.edu, laan@aei.mpg.de, dmalamen@uci.edu, cmchen@phy.ncu.edu.tw, nester@phy.ncu.edu.tw, tod@maths.ox.ac.uk, 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, helfera@missouri.edu, schoen@math.stanford.edu, stefan.hollands@itp.uni-leipzig.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, pollack@uw.edu, psjcosmos@gmail.com, goswami@ukzn.ac.za, info@copernicuscenter.edu.pl, grideoutjr@aol.com, josemm.senovilla@ehu.es, matt.visser@msor.vuw.ac.nz, vpetkov@minkowskiinstitute.org, john.stachel@gmail.com, david\_brown@ncsu.edu, damour@ihes.fr, landsman@math.ru.nl, johnmlee@uw.edu, mtwang@math.columbia.edu, patrick-duerr@gmx.de, gpe@ast.cam.ac.uk, mph@mrao.cam.ac.uk, a.n.lasenby@mrao.cam.ac.uk, FGS@weizmann.ac.il

Dear colleagues,

I would like to inform you about my project for producing electricity with modified gravity: please see the drawing attached and check out <http://chakalov.net/Newton.pdf>

Will be happy to elaborate.

Kind regards,

D. Chakalov  
<http://chakalov.net/#reports>



My proposal for producing unlimited electricity is based on gravitational rotation, as gravity can rotate a whole galaxy in 60c. Just spin the steam turbine rotors in the power plants with spacetime engineering. There is no need for water supply, heat, nor coal or poisonous nuclear fuel. Is this possible? Why not?

proposal.jpg  
67K



Dimi Chakalov &lt;dchakalov@gmail.com&gt;

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**Re: The Fifth Force**

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**Dimi Chakalov** <dchakalov@gmail.com>

Sun, Sep 25, 2022 at 5:45 PM

To: yraptis@central.ntua.gr, anastop@physics.upatras.gr, ksavvidou@upatras.gr, piotr.chrusciel@univie.ac.at, florian.bonell@univie.ac.at, david.fajman@univie.ac.at, thomas.mieling@univie.ac.at, maximilian.ofner@univie.ac.at, mateja.gosenca@univie.ac.at, stefan.palenta@univie.ac.at, f.steininger@univie.ac.at, svozil@tuwien.ac.at, michele.maggiore@unige.ch, zhaoyanwu2000@yahoo.com, norbert.straumann@gmail.com, jacobson@umd.edu, joergf@maths.otago.ac.nz, vrovenski@univ.haifa.ac.il, yuyuetony@gmail.com, deepthought@asu.edu, michal.p.heller@aei.mpg.de, gerhard.heinzel@aei.mpg.de, georgi.dvali@physik.uni-muenchen.de, andreas.doering@fau.de, erik@strangebeautiful.com, hand@chalmers.se, rteams@esi.ac.at, gary@physics.ucsb.edu, galloway@math.miami.edu, laan@aei.mpg.de, dmalaman@uci.edu, 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, helfera@missouri.edu, schoen@math.stanford.edu, stefan.hollands@itp.uni-leipzig.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, unruh@physics.ubc.ca, xzhang@amss.ac.cn, janusz.garecki@usz.edu.pl, info@copernicuscenter.edu.pl, grideoutjr@aol.com, josemm.senovilla@ehu.es, matt.visser@msor.vuw.ac.nz, vpetkov@minkowskiinstitute.org, john.stachel@gmail.com, david\_brown@ncsu.edu, damour@ihes.fr, landsman@math.ru.nl, FGS@weizmann.ac.il, ilan.lampl@weizmann.ac.il, gilad.perez@weizmann.ac.il, ziv.reich@weizmann.ac.il, ron.milo@weizmann.ac.il, eli.waxman@weizmann.ac.il, elad.schneidman@weizmann.ac.il, elisha.moses@weizmann.ac.il, adiel.stern@weizmann.ac.il, kfir.blum@weizmann.ac.il, doron.kushnir@weizmann.ac.il, boaz.katz@weizmann.ac.il, barak.zackay@weizmann.ac.il, avishay.galyam@weizmann.ac.il, pollack@uw.edu, Claudio Cazorla <claudio.cazorla@upc.edu>, Ralf Metzler <rmetzler@uni-potsdam.de>, Thomas Beyer <thomas.beyer@meduniwien.ac.at>, Marcel Filoche <marcel.filoche@polytechnique.edu>, Jan De Boer <j.deboer@uva.nl>, Jasper Van Der Gucht <jasper.vandergucht@wur.nl>, Raul Arenal <arenal@unizar.es>, Georgios Balasis <gbalasis@noa.gr>, Andrea Bassi <andrea1.bassi@polimi.it>, Hendrick Bethlem <h.l.bethlem@vu.nl>, Pascal Brault <pascal.brault@univ-orleans.fr>, Irene Buvat <irene.buvat@curie.fr>, Rudolf von Steiger <vsteiger@issibern.ch>

P.S. Read p. 11 (last) at <http://chakalov.net/text.pdf>  
or watch <http://chakalov.net/YES.mp4> (85sec).

D. Chakalov  
<http://chakalov.net/#reports>

On Wed, Jun 8, 2022 at 2:51 PM, Dimi Chakalov <dchakalov@gmail.com> wrote:  
[snip]



Dimi Chakalov &lt;dchakalov@gmail.com&gt;

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**Re: Physics for mathematicians**


---

Dimi Chakalov &lt;dchakalov@gmail.com&gt;

Wed, Sep 14, 2022 at 10:38 AM

To: zhaoyanwu2000@yahoo.com, pollack@uw.edu, xzhang@amss.ac.cn, nester@phy.ncu.edu.tw, kuchar@physics.utah.edu, unruh@physics.ubc.ca, norbert.straumann@gmail.com, helfera@missouri.edu, baez@math.ucr.edu, c.isham@imperial.ac.uk, hohanian@uvm.edu, erik@strangebeautiful.com, geroch@uchicago.edu, matt.visser@msor.vuw.ac.nz, gfrellis@gmail.com, john.stachel@gmail.com, b.j.carr@qmul.ac.uk, rmwa@uchicago.edu, piotr.chrusciel@univie.ac.at, mtwang@math.columbia.edu, giulini@itp.uni-hannover.de, josemm.senovilla@ehu.es, david\_brown@ncsu.edu, joergf@maths.otago.ac.nz, gary@physics.ucsb.edu, galloway@math.miami.edu, laan@aei.mpg.de, dmalaman@uci.edu, cmchen@phy.ncu.edu.tw, tod@maths.ox.ac.uk, seri@math.princeton.edu, H.S.Reall@damtp.cam.ac.uk, hvanelst@karlshochschule.de, schoen@math.stanford.edu, stefan.hollands@itp.uni-leipzig.de, landsman@math.ru.nl, jacobson@umd.edu, FGS@weizmann.ac.il

Cc: John M Lee <johnmlee@uw.edu>

P.S. It is \*mathematically\* impossible to "remove" the ambient infinite-dimensional Euclidean space in which all manifolds live: read p. 11 and p. 19 (last) in <http://chakalov.net/talk.pdf>

John M. Lee claims he can do that (Introduction to Topological Manifolds, 2010, pp. 19-20), only he failed to explain. Can you help your colleague to eventually construct some "Hausdorff manifold"? <https://www.youtube.com/watch?v=QuWMSwclxN0&t=81s>

D.C.

On Sun, Sep 11, 2022 at 3:55 PM, Dimi Chakalov <dchakalov@gmail.com> wrote:

>  
> Check out the last page in  
> <http://chakalov.net/talk.pdf>  
>  
> D. Chakalov  
> <http://chakalov.net/#reports>

**John M. Lee, *Introduction to Topological Manifolds*, 2010, p. 19:**

In this chapter we begin our study in earnest. The first order of business is to build up enough machinery to give a proper definition of manifolds. The chief problem with the provisional definition given in Chapter 1 is that it depends on having an "ambient Euclidean space" in which our  $n$ -manifold lives. This introduces a great deal of extraneous structure that is **irrelevant to our purposes**. Instead, we would like to view a manifold as a mathematical object in its own right, not as a subset of some larger space. The key concept that makes this possible is that of a *topological space*.

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Can you paint a picture without a canvas?

D. Chakalov





Dimi Chakalov &lt;dchakalov@gmail.com&gt;

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## Re-interpretation of "negative mass"

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Dimi Chakalov &lt;dchakalov@gmail.com&gt;

Thu, Sep 8, 2022 at 4:04 AM

To: zhaoyanwu2000@yahoo.com, xzhang@amss.ac.cn, nester@phy.ncu.edu.tw, cmchen@phy.ncu.edu.tw, kuchar@physics.utah.edu, unruh@physics.ubc.ca, norbert.straumann@gmail.com, helfera@missouri.edu, baez@math.ucr.edu, janusz.garecki@usz.edu.pl, c.isham@imperial.ac.uk, hohanian@uvm.edu, giulini@itp.uni-hannover.de, josemm.senovilla@ehu.es, david\_brown@ncsu.edu, joergf@maths.otago.ac.nz, svozil@tuwien.ac.at, erik@strangebeautiful.com, geroch@uchicago.edu, matt.visser@msor.vuw.ac.nz, gfrellis@gmail.com, john.stachel@gmail.com, b.j.carr@qmul.ac.uk, rmwa@uchicago.edu, mtwang@math.columbia.edu, patrick-duerr@gmx.de, gpe@ast.cam.ac.uk, mph@mrao.cam.ac.uk, a.n.lasenby@mrao.cam.ac.uk

See attached. More on p. 10 (last) in  
<http://chakalov.net/text.pdf>

D. Chakalov  
<http://chakalov.net/#reports>

On Mon, Nov 15, 2021 at 1:18 PM, Dimi Chakalov <dchakalov@gmail.com> wrote:

>  
> Dear Colleagues,  
>  
> I believe have discovered the fifth force. It works in all quantum and  
> gravitational systems, as well as in all living organisms, including  
> your brain.  
[snip]

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Excerpt from p. 5 in *Physics of Life: The Fifth Force* at [chakalov.net/history.pdf](http://chakalov.net/history.pdf)

There is no chance for “runaway motion”, because the so-called “negative mass” occupies the potential future (“carrot”) in the *atom of geometry* <sup>[4]</sup>. See the so-called *evolution equation* at p. 28 in *The Physics of Life* [here](#).

In brief, instead of searching for some brand new *physical* field to play the role of a ‘two-way mediator’ (p. 1) that *interacts* with the brain (photo 2), we tweak the mantra ‘only matter can interact with matter’ by suggesting that matter can interact with *itself*, by the *self-acting* (Sic!) Fifth Force <sup>[4]</sup>. Thus, the Fifth Force is the origin of *gravitalized energy* as well. *Voila*.



Dimi Chakalov <dchakalov@gmail.com>

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## General Relativity in a Nutshell, by Alan Macdonald (October 2, 2017)

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Dimi Chakalov <dchakalov@gmail.com>

Wed, Aug 17, 2022 at 4:24 PM

To: Alan Macdonald <macdonal@luther.edu>

Cc: pollack@uw.edu, yraptis@central.ntua.gr, anastop@physics.upatras.gr, ksavvidou@upatras.gr, piotr.chrusciel@univie.ac.at, florian.bonell@univie.ac.at, david.fajman@univie.ac.at, thomas.mieling@univie.ac.at, maximilian.ofner@univie.ac.at, mateja.gosenca@univie.ac.at, stefan.palenta@univie.ac.at, f.steining@univie.ac.at, svozil@tuwien.ac.at, michele.maggiore@unige.ch, zhaoyanwu2000@yahoo.com, norbert.straumann@gmail.com, jacobson@umd.edu, joergf@maths.otago.ac.nz, vrovenski@univ.haifa.ac.il, yuyuetony@gmail.com, deepthought@asu.edu, michal.p.heller@aei.mpg.de, gerhard.heinzel@aei.mpg.de, georgi.dvali@physik.uni-muenchen.de, andreas.doering@fau.de, erik@strangebeautiful.com, hand@chalmers.se, rteams@esi.ac.at, gary@physics.ucsb.edu, galloway@math.miami.edu, laan@aei.mpg.de, dmalaman@uci.edu, 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, helfera@missouri.edu, schoen@math.stanford.edu, stefan.hollands@itp.uni-leipzig.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, unruh@physics.ubc.ca, xzhang@amss.ac.cn, janusz.garecki@usz.edu.pl, info@copernicuscenter.edu.pl, grideoutjr@aol.com, josemm.senovilla@ehu.es, matt.visser@msor.vuw.ac.nz, vpetkov@minkowskiinstitute.org, john.stachel@gmail.com, david\_brown@ncsu.edu, damour@ihes.fr, landsman@math.ru.nl, FGS@weizmann.ac.il

Dear Dr. Macdonald ,

May share two comments. You wrote at p. 57:

"The  $r = 2m$  surface is called the (event) horizon of the black hole."

Do you know that the "event horizon" is crap? See

[http://www.god-does-not-play-dice.net/WH\\_BH.jpg](http://www.god-does-not-play-dice.net/WH_BH.jpg)

p. 71: "Dark matter neither emits nor absorbs electromagnetic radiation (hence its name)." p. 74: "The discovery of dark energy caused a sensation." p. 78: "The most unsatisfactory feature of general relativity is its conception of matter."

Read <http://chakalov.net/text.pdf>

All the best,

Dimi Chakalov

<http://chakalov.net/#reports>





Dimi Chakalov <dchakalov@gmail.com>

## The so-called GW150914 is FRAUD.

Dimi Chakalov <dchakalov@gmail.com>

Sat, Aug 13, 2022 at 1:08 PM

To: allenkc@mit.edu, wclavin@caltech.edu, mlandry@caltech.edu, giaime@caltech.edu, lsc-spokesperson@ligo.org, outreach@ligo-wa.caltech.edu, dhs@ligo.mit.edu

Ladies and Gentlemen:

See attached an excerpt from p. 7 (last) in  
<http://chakalov.net/text.pdf>

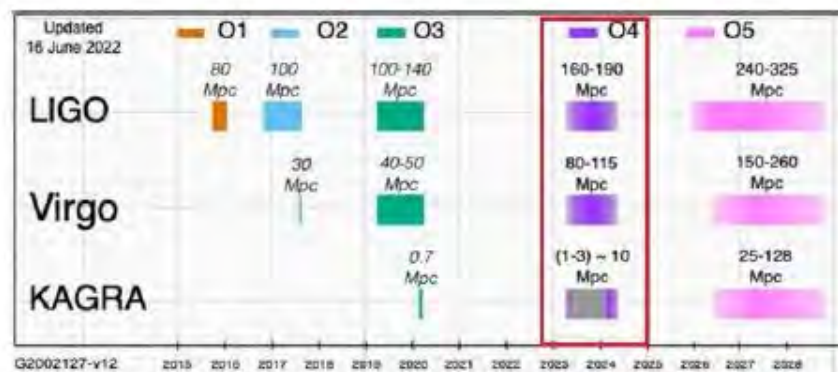
Yes, GW150914 is FRAUD.

D. Chakalov  
<http://chakalov.net/#reports>

p\_7.jpg

69K

Can the LIGO experts convert “gravitons” into gamma-ray bursts? The first failure to suggest some coupling of gravity to EM field was in 1914. No way.



LIGO News, June 17, 2022: O4 will begin in March 2023. It is expected to last **one full year**. The three “runs” so far, O1 - O3, showed no “gravitational-wave signals” (arXiv: 2103.08520v4, 15 March 2021). None. Zilch.



Dimi Chakalov &lt;dchakalov@gmail.com&gt;

## Re: The so-called GW150914 is FRAUD.

Dimi Chakalov <dchakalov@gmail.com>

Sat, Aug 13, 2022 at 12:28 PM

To: weiss@ligo.mit.edu, kip@caltech.edu, barish@ligo.caltech.edu, joan.centrella@mail.wvu.edu, michael.zucker@ligo.org, schutzbf@cardiff.ac.uk, rana@caltech.edu, rana.adhikari@ligo.org, question@ligo.org, lscspokesperson@ligo.org, outreach@ligo-wa.caltech.edu, kholt@ligo-la.caltech.edu, giaime@caltech.edu, mlandry@caltech.edu, wclavin@caltech.edu, allenkc@mit.edu, ajw@caltech.edu, nsych@caltech.edu, joann@caltech.edu, dreitze@caltech.edu, mjudd@kiss.caltech.edu, gxh@ipac.caltech.edu, srk@astro.caltech.edu, angela.borchers@ligo.org, wolfgang.kastaun@ligo.org, benjamin.knispel@ligo.org, nv.krishnendu@ligo.org, frank.ohme@ligo.org, alessandra.buonanno@ligo.org, jonathan.gair@ligo.org, harald.pfeiffer@ligo.org, michael.katz@ligo.org, steffen.grunewald@ligo.org, otto.hannuksela@ligo.org, tjonnie.li@ligo.org, chunfung.wong@ligo.org, szabolcs.marka@ligo.org, zsuzsanna.marka@ligo.org, jordan.camp@ligo.org, stuart.anderson@ligo.org, lisa.barsotti@ligo.org, aidan.brooks@ligo.org, katerina.chatziioannou@ligo.org, betsy.weaver@ligo.org, patrickduerr@gmx.de, gpe@ast.cam.ac.uk, mph@mrao.cam.ac.uk, a.n.lasenby@mrao.cam.ac.uk

P.S. See an excerpt (attached) from p. 7 in

<http://chakalov.net/text.pdf>

Yes, GW150914 is FRAUD.

More from Kip Thorne at

[http://chakalov.net/p\\_9.jpg](http://chakalov.net/p_9.jpg)

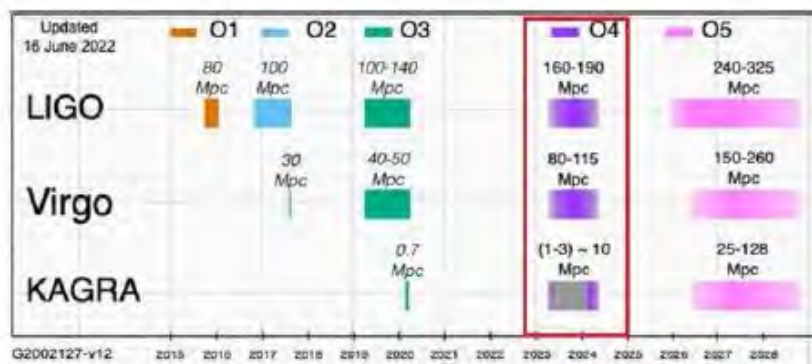
D. Chakalov

<http://chakalov.net/#reports>

On Mon, Feb 14, 2022 at 4:44 AM, Dimi Chakalov <dchakalov@gmail.com> wrote:

[snip]

Can the LIGO experts convert “gravitons” into gamma-ray bursts? The first failure to suggest some coupling of gravity to EM field was in 1914. No way.



LIGO News, June 17, 2022: O4 will begin in March 2023. It is expected to last one full year. The three “runs” so far, O1 - O3, showed no “gravitational-wave signals” (arXiv: 2103.08520v4, 15 March 2021). None. Silch.



Dimi Chakalov &lt;dchakalov@gmail.com&gt;

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**Re: The Fifth Force**

---

**Dimi Chakalov** <dchakalov@gmail.com>

Fri, Aug 5, 2022 at 2:08 PM

To: yraptis@central.ntua.gr, anastop@physics.upatras.gr, ksavvidou@upatras.gr, piotr.chrusciel@univie.ac.at, florian.bonell@univie.ac.at, david.fajman@univie.ac.at, thomas.mieling@univie.ac.at, maximilian.ofner@univie.ac.at, mateja.gosenca@univie.ac.at, stefan.palenta@univie.ac.at, f.steininger@univie.ac.at, svozil@tuwien.ac.at, michele.maggiore@unige.ch, zhaoyanwu2000@yahoo.com, norbert.straumann@gmail.com, jacobson@umd.edu, joergf@maths.otago.ac.nz, vrovenski@univ.haifa.ac.il, yuyuetony@gmail.com, deepthought@asu.edu, michal.p.heller@aei.mpg.de, gerhard.heinzel@aei.mpg.de, georgi.dvali@physik.uni-muenchen.de, andreas.doering@fau.de, erik@strangebeautiful.com, hand@chalmers.se, rteams@esi.ac.at, gary@physics.ucsb.edu, galloway@math.miami.edu, laan@aei.mpg.de, dmalaman@uci.edu, 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, helfera@missouri.edu, schoen@math.stanford.edu, stefan.hollands@itp.uni-leipzig.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, unruh@physics.ubc.ca, xzhang@amss.ac.cn, janusz.garecki@usz.edu.pl, andrzej.krolak@ncbj.gov.pl, info@copernicuscenter.edu.pl, grideoutjr@aol.com, josemm.senovilla@ehu.es, matt.visser@msor.vuw.ac.nz, vpetkov@minkowskiinstitute.org, john.stachel@gmail.com, david\_brown@ncsu.edu, damour@ihes.fr, landsman@math.ru.nl

Cc: Ralf Metzler <rmetzler@uni-potsdam.de>, Thomas Beyer <thomas.beyer@meduniwien.ac.at>, marcel.filoche@polytechnique.edu, Jan De Boer <j.deboer@uva.nl>, jasper.vandergucht@wur.nl, Raul Arenal <arenal@unizar.es>, Georgios Balasis <gbalasis@noa.gr>, Andrea Bassi <andrea1.bassi@polimi.it>, Hendrick Bethlem <h.l.bethlem@vu.nl>, Pascal Brault <pascal.brault@univ-orleans.fr>, Irene Buvat <irene.buvat@curie.fr>

The text version of my newest video is at

<http://chakalov.net/text.pdf>

D.C.

On Wed, Jun 8, 2022 at 2:51 PM, Dimi Chakalov <dchakalov@gmail.com> wrote:

>

> Dear Colleagues,

>

> Please see

> <http://chakalov.net/talk.pdf>

> Hope you will like it... or your money back:-)

[snip]



Dimi Chakalov &lt;dchakalov@gmail.com&gt;

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## The Fifth Force

---

Dimi Chakalov &lt;dchakalov@gmail.com&gt;

Wed, Jun 8, 2022 at 2:51 PM

To: yraptis@central.ntua.gr, anastop@physics.upatras.gr, ksavvidou@upatras.gr, piotr.chrusciel@univie.ac.at, florian.bonell@univie.ac.at, david.fajman@univie.ac.at, thomas.mieling@univie.ac.at, maximilian.ofner@univie.ac.at, mateja.gosenca@univie.ac.at, stefan.palenta@univie.ac.at, f.steininger@univie.ac.at, svozil@tuwien.ac.at, michele.maggiore@unige.ch, zhaoyanwu2000@yahoo.com, norbert.straumann@gmail.com, jacobson@umd.edu, joergf@maths.otago.ac.nz, vrovenski@univ.haifa.ac.il, yuyuetony@gmail.com, deepthought@asu.edu, michal.p.heller@aei.mpg.de, gerhard.heinzel@aei.mpg.de, georgi.dvali@physik.uni-muenchen.de, andreas.doering@fau.de, erik@strangebeautiful.com, hand@chalmers.se, rteams@esi.ac.at, gary@physics.ucsb.edu, galloway@math.miami.edu, laan@aei.mpg.de, dmalamen@uci.edu, 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, helfera@missouri.edu, schoen@math.stanford.edu, stefan.hollands@itp.uni-leipzig.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, unruh@physics.ubc.ca, xzhang@amss.ac.cn, janusz.garecki@usz.edu.pl, andrzej.krolak@ncbj.gov.pl, info@copernicuscenter.edu.pl, grideoutjr@aol.com, josemm.senovilla@ehu.es, matt.visser@msor.vuw.ac.nz, vpetkov@minkowskiinstitute.org, john.stachel@gmail.com, david\_brown@ncsu.edu, damour@ihes.fr

Cc: Ralf Metzler <rmetzler@uni-potsdam.de>, Thomas Beyer <thomas.beyer@meduniwien.ac.at>, Marcel Filoche <marcel.filoche@polytechnique.edu>, Jan De Boer <j.deboer@uva.nl>, Jasper Van Der Gucht <jasper.vandergucht@wur.nl>, Raul Arenal <arenal@unizar.es>, Georgios Balasis <gbalasis@noa.gr>, Andrea Bassi <andrea1.bassi@polimi.it>, Hendrick Bethlem <h.l.bethlem@vu.nl>, Pascal Brault <pascal.brault@univ-orleans.fr>, Irene Buvat <irene.buvat@curie.fr>

Dear Colleagues,

Please see

<http://chakalov.net/talk.pdf>

Hope you will like it... or your money back:-)

In January this year, I contacted 13 laboratories in 8 European countries and offered them to conduct the experimental verification of the fifth force, under controlled conditions, but nobody replied. I can offer again a home video, like the one from January 2020, <http://chakalov.net/donkey.png>

Do you suspect that I might be using some "special gadgets" and/or "animation software" ?

Sincerely,

Dimi Chakalov  
[chakalov.net](http://chakalov.net)



Dimi Chakalov &lt;dchakalov@gmail.com&gt;

---

**Re: The Fifth Force**

---

**Dimi Chakalov** <dchakalov@gmail.com>

Thu, Jun 16, 2022 at 3:29 PM

To: pollack@uw.edu, galloway@math.miami.edu, piotr.chrusciel@univie.ac.at, yraptis@central.ntua.gr, anastop@physics.upatras.gr, ksavvidou@upatras.gr, florian.bonell@univie.ac.at, david.fajman@univie.ac.at, thomas.mieling@univie.ac.at, maximilian.ofner@univie.ac.at, mateja.gosenca@univie.ac.at, stefan.palenta@univie.ac.at, f.steining@univie.ac.at, svozil@tuwien.ac.at, michele.maggiore@unige.ch, zhaoyanwu2000@yahoo.com, norbert.straumann@gmail.com, jacobson@umd.edu, joergf@maths.otago.ac.nz, vrovnski@univ.haifa.ac.il, yuyuetony@gmail.com, deepthought@asu.edu, michal.p.heller@aei.mpg.de, gerhard.heinzel@aei.mpg.de, georgi.dvali@physik.uni-muenchen.de, andreas.doering@fau.de, erik@strangebeautiful.com, hand@chalmers.se, rteams@esi.ac.at, gary@physics.ucsb.edu, laan@aei.mpg.de, dmalamen@uci.edu, 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, helfera@missouri.edu, schoen@math.stanford.edu, stefan.hollands@itp.uni-leipzig.de, c.isham@imperial.ac.uk, 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, unruh@physics.ubc.ca, xzhang@amss.ac.cn, janusz.garecki@usz.edu.pl, andrzej.krolak@ncbj.gov.pl, info@copernicuscenter.edu.pl, grideoutjr@aol.com, josemm.senovilla@ehu.es, matt.visser@msor.vuw.ac.nz, vpetkov@minkowskiinstitute.org, john.stachel@gmail.com, david\_brown@ncsu.edu, damour@ihes.fr

P.S. If you want math, see  
<http://chakalov.net/sampler.jpg>

More at  
<http://chakalov.net/talk.pdf>  
<http://chakalov.net/RS.pdf>

D.C.

On Wed, Jun 8, 2022 at 2:51 PM, Dimi Chakalov <dchakalov@gmail.com> wrote:  
[snip]





Dimi Chakalov &lt;dchakalov@gmail.com&gt;

## Old Tanzanian saying

Dimi Chakalov &lt;dchakalov@gmail.com&gt;

Fri, Jun 24, 2022 at 12:12 PM

To: brill@umd.edu, pollack@uw.edu, galloway@math.miami.edu, piotr.chrusciel@univie.ac.at, yraptis@central.ntua.gr, anastop@physics.upatras.gr, ksavvidou@upatras.gr, florian.bonell@univie.ac.at, david.fajman@univie.ac.at, thomas.mieling@univie.ac.at, maximilian.ofner@univie.ac.at, mateja.gosenca@univie.ac.at, stefan.palenta@univie.ac.at, f.steining@univie.ac.at, svozil@tuwien.ac.at, michele.maggiore@unige.ch, zhaoyanwu2000@yahoo.com, norbert.straumann@gmail.com, jacobson@umd.edu, joergf@maths.otago.ac.nz, vrovenski@univ.haifa.ac.il, yuyuetony@gmail.com, deepthought@asu.edu, michal.p.heller@aei.mpg.de, gerhard.heinzel@aei.mpg.de, georgi.dvali@physik.uni-muenchen.de, andreas.doering@fau.de, erik@strangebeautiful.com, hand@chalmers.se, rteams@esi.ac.at, gary@physics.ucsb.edu, laan@aei.mpg.de, dmalamen@uci.edu, 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, helfera@missouri.edu, schoen@math.stanford.edu, stefan.hollands@itp.uni-leipzig.de, c.isham@imperial.ac.uk, 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, unruh@physics.ubc.ca, xzhang@amss.ac.cn, janusz.garecki@usz.edu.pl, andrzej.krolak@ncbj.gov.pl, info@copernicuscenter.edu.pl, grideoutjr@aol.com, josemm.senovilla@ehu.es, matt.visser@msor.vuw.ac.nz, vpetkov@minkowskiinstitute.org, john.stachel@gmail.com, david\_brown@ncsu.edu, damour@ihes.fr

<http://chakalov.net/sampler.jpg>[http://chakalov.net/Slide\\_1.jpg](http://chakalov.net/Slide_1.jpg)[http://chakalov.net/p\\_12.jpg](http://chakalov.net/p_12.jpg)[http://chakalov.net/p\\_3.jpg](http://chakalov.net/p_3.jpg)<http://chakalov.net/talk.pdf><http://chakalov.net/RS.pdf>

D. Chakalov





Dimi Chakalov &lt;dchakalov@gmail.com&gt;

## The Fifth Force: Have your cake and eat it!

Dimi Chakalov &lt;dchakalov@gmail.com&gt;

Sat, Jun 25, 2022 at 12:02 PM

To: Dianna &lt;info@physicsgirl.org&gt;

Cc: brill@umd.edu, pollack@uw.edu, galloway@math.miami.edu, piotr.chrusciel@univie.ac.at, yraptis@central.ntua.gr, anastop@physics.upatras.gr, ksavidou@upatras.gr, florian.bonell@univie.ac.at, david.fajman@univie.ac.at, thomas.mieling@univie.ac.at, maximilian.ofner@univie.ac.at, mateja.gosenca@univie.ac.at, stefan.palenta@univie.ac.at, f.steinger@univie.ac.at, svozil@tuwien.ac.at, michele.maggiore@unige.ch, zhaoyanwu2000@yahoo.com, norbert.straumann@gmail.com, jacobson@umd.edu, joergf@maths.otago.ac.nz, vrovenski@univ.haifa.ac.il, yuyuetony@gmail.com, deepthought@asu.edu, michal.p.heller@aei.mpg.de, gerhard.heinzel@aei.mpg.de, georgi.dvali@physik.uni-muenchen.de, andreas.doering@fau.de, erik@strangebeautiful.com, hand@chalmers.se, rteams@esi.ac.at, gary@physics.ucsb.edu, laan@aei.mpg.de, dmalamen@uci.edu, 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, helfera@missouri.edu, schoen@math.stanford.edu, stefan.hollands@itp.uni-leipzig.de, c.isham@imperial.ac.uk, 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, unruh@physics.ubc.ca, xzhang@amss.ac.cn, janusz.garecki@usz.edu.pl, andrzej.krolak@ncbj.gov.pl, info@copernicuscenter.edu.pl, grideoutjr@aol.com, josemm.senovilla@ehu.es, matt.visser@msor.vuw.ac.nz, vpetkov@minkowskiinstitute.org, john.stachel@gmail.com, david\_brown@ncsu.edu, damour@ihes.fr

[http://chakalov.net/p\\_12.jpg](http://chakalov.net/p_12.jpg)

Details in

<http://chakalov.net/sampler.jpg>

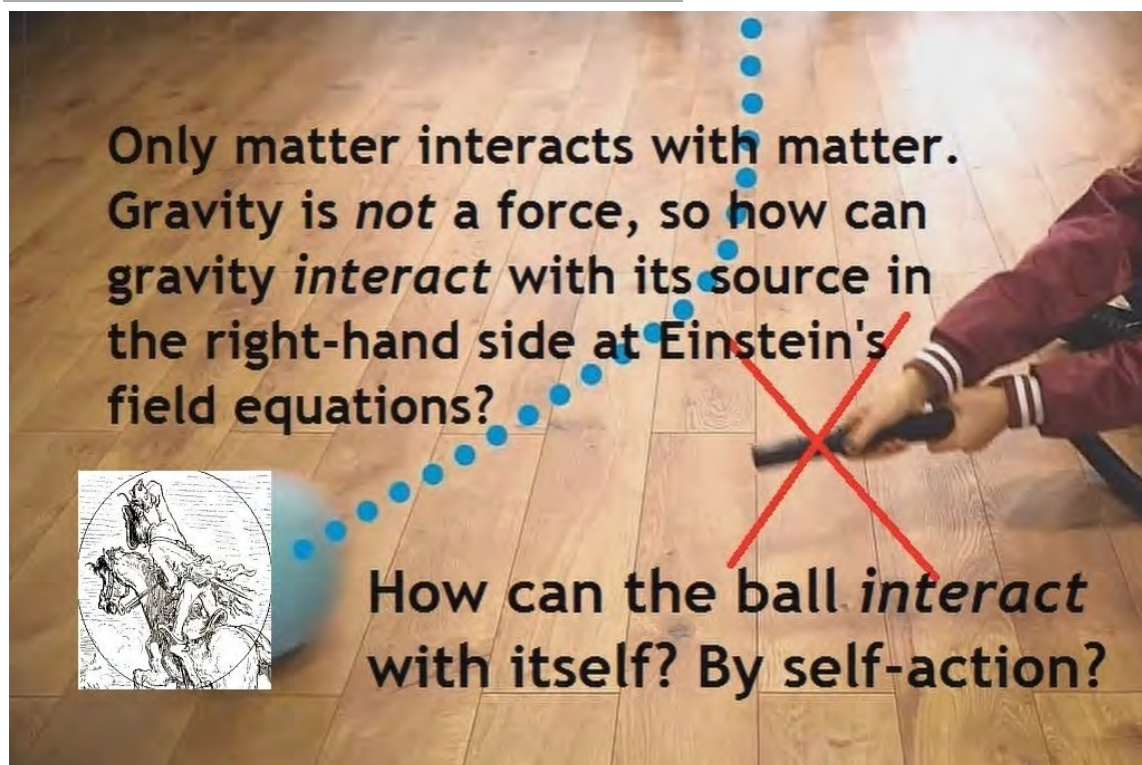
[http://chakalov.net/Slide\\_1.jpg](http://chakalov.net/Slide_1.jpg)

[http://chakalov.net/p\\_3.jpg](http://chakalov.net/p_3.jpg)

<http://chakalov.net/talk.pdf>

<http://chakalov.net/RS.pdf>

D. Chakalov



<http://www.god-does-not-play-dice.net/Dianna.mp4>





Dimi Chakalov &lt;dchakalov@gmail.com&gt;

## Convert "gravitons" to gamma-ray bursts?

Dimi Chakalov <dchakalov@gmail.com>

Sat, Aug 13, 2022 at 2:43 PM

To: valerie.connaughton@nasa.gov, pgarnavi@nd.edu, woodw024@umn.edu, sven@uoguelph.ca, soker@physics.technion.ac.il, fozel@arizona.edu, avikhlinin@head.cfa.harvard.edu, mwb@space.mit.edu, stefan.m.immler@nasa.gov, dominic.benford@nasa.gov, thomas.hams-1@nasa.gov, brad.cenko@nasa.gov, elizabeth.a.pumphrey@nasa.gov, peterm@stanford.edu, lorella.angelini-1@nasa.gov, persis@stanford.edu, julio@star.le.ac.uk, hanna@physics.mcgill.ca, mario.perez@nasa.gov, hdieter@clemsn.edu, frank.marshall@nasa.gov, siegel@swift.psu.edu, mjp@mssl.ucl.ac.uk, gianpiero.tagliaferri@brera.inaf.it, bcarpenter@nasa.gov, devon.w.griffin@nasa.gov, giommi@asi.it, william.b.latter@nasa.gov, kevin.y.sato@nasa.gov, patricia.m.knezek@nasa.gov, bruce.a.tagg@nasa.gov, HQ-FINESST@mail.nasa.gov, community@space.com

Dear colleagues,

Sorry for my unsolicited email. May I ask a question.

Do you know how to convert "gravitons" (if any) to gamma-ray bursts?

Please see attached an excerpt from p. 7 (last) at

<http://chakalov.net/text.pdf>

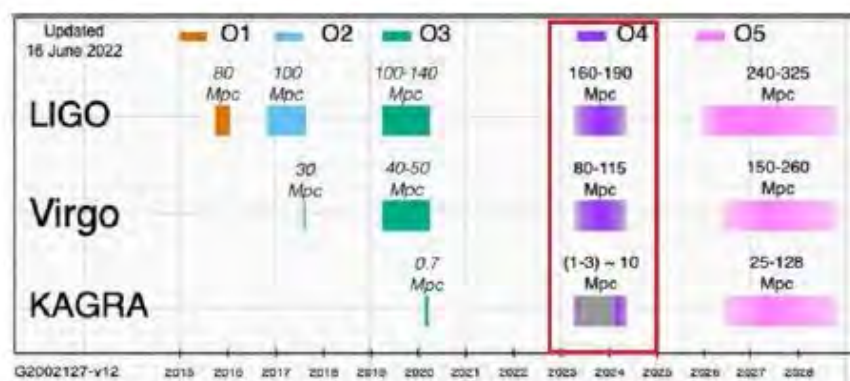
Your insights will be highly appreciated. Thank you for your time.

Kind regards,

Dimi Chakalov

<http://chakalov.net/#reports>

Can the LIGO experts convert "gravitons" into gamma-ray bursts? The first failure to suggest some coupling of gravity to EM field was in 1914. No way.



LIGO News, June 17, 2022: O4 will begin in March 2023. It is expected to last one full year. The three "runs" so far, O1 - O3, showed no "gravitational-wave signals" (arXiv: 2103.08520v4, 15 March 2021). None. Zilch.



Dimi Chakalov <dchakalov@gmail.com>

## STOP funding LIGO!

Dimi Chakalov <dchakalov@gmail.com>

Sun, Aug 14, 2022 at 12:56 AM

To: Daniel A Reed <danreed@nsf.gov>, Victor R McCrary <vmccrary@nsf.gov>, Alan Stern <sastern@nsf.gov>, Anneila Sargent <afs@astro.caltech.edu>, Matthew Malkan <malkan@astro.ucla.edu>, Heather Wilson <hwilson@utep.edu>  
Cc: jplozai@nsf.gov, dzannino@nsf.gov, linhu@associates.nsf.gov, jveysey@nsf.gov, emoran@nsf.gov, nlymn@nsf.gov, beta-nsf-feedback@nsf.gov, info@nsf.gov

Ladies and Gentlemen:

You support LIGO. Don't.

See an excerpt (attached) from p. 7 in

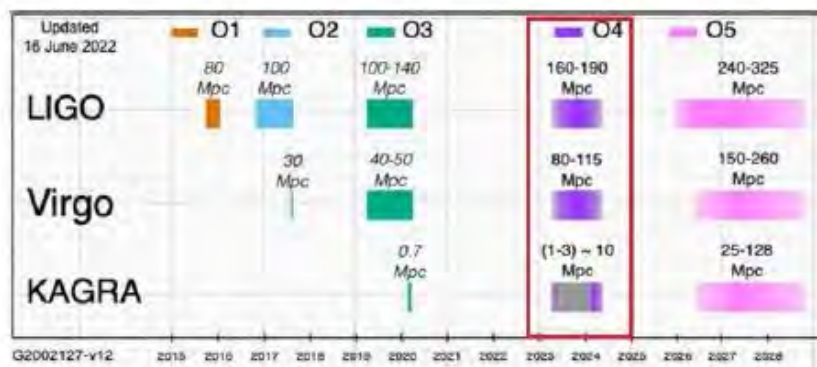
<http://chakalov.net/text.pdf>

I stand ready to explain the facts.

Yours sincerely,

Dimi Chakalov  
[chakalov.net](http://chakalov.net)

Can the LIGO experts convert “gravitons” into gamma-ray bursts? The first failure to suggest some coupling of gravity to EM field was in 1914. No way.



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