Instant Gravity and Real Time Astronomy in a Real
Time Universe

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This paper and concomitant presentation comprise insights into reality of real
time astronomy as well as local instant gravity in a real time universe as a subset of the
infinitude of nested worlds. Upfront are a few assumptions and definitions of elusive
terms such as light, gravity, mass, time and real time astronomy to name a few and
their nexus to URL (Universal Relationship Law) which is comparable in scope to
Newton’s UGL (Universal Gravitation Law). Reality of light and a theory of locally
created gravity are then explored in greater detail and put in the perspective of
real time astronomy. A prima facie case is made for motion of our mencro
scale world as the cause and gravity as the result that is derived from common
day everyday human experience, to which we can all easily relate. Gravity does not make
the world go around but world going around makes gravity go. The presentation is founded
on the unity of truth and one reality. Real Time astronomy is not a look
back at Big Bang. Relationship between real time astronomy and quantum physics is not a
coincidence. Universe is not geocentric, heliocentric or galactocentric, but is anthropic,
anthropocentric, omnincentric and even panthroptimum. A helpful tool in my quest for
real time astronomy is purging of erroneous knowledge especially if it originated from such icons of science as Aristotle, Galileo, Newton, Darwin and Einstein. A prominent
role is played by two minor corrections to Newton’s first law of motion as well as two minor corrections to Einstein’s special relativity theory and how engineers by trial and error made GPS (Global Positioning System) work, in spite of the wrong science.

1. Introduction

The concept of real time astronomy is counter intuitive and
contra human experience. The concept of Instant gravity is even
more puzzling for human brain. This makes the title of this presen-
tation suspect even appear as crackpot science. Nonetheless it
is my objective to convince you that there is but one reality in
here and out there and real time universe, real time astronomy
and instant gravity are integral part of it. The concept of real
time in cosmology is similar to that we are accustomed to in com-
puter science, where the response is real time if the delay is not exces-
sive vis-à-vis the patience, needs and circumstances of the user.
The instant gravity on the other hand is a foreign concept to hu-
mn brain and does not have the same meaning as in instant gra-
tification. These concepts are particularly hard in the back drop
of human experience and big bang singularity, instead of the
more realistic infinitude of singularities.

2. Assumptions

I am not making any assumptions which are not part of my
worldview. Besides why would I want to make an ASS out of U
and ME? Therefore my starting point is that neither you nor I
created this universe any more than you created me or I created
you. The foundation of everything in my life is that a Panthro-
timum God created this orderly universe, which follows laws
and has common attributes applicable to everything, everybody
everywhere. For example everything is virtual particle(s)
with wide range of size, duration and density, is finite, has pur-
pose, happens in real time has infinite variety and is temporary &
temporal. Everybody has freedom to choose between right and
wrong and laws of Physics are the same everywhere in every
frame of reference in the infinitude of nested worlds like the Rus-
sian dolls. Everything is relative in our physical universe but

absolute in virtual universe of God. The danger of relativity is
that anything good can appear and become bad when compared
to something better and conversely anything bad can look and
feel good when compared to something worse.

3. Definitions

1. Exa = 1018 (Reciprocal of Atto 10-18)
2. EXTROPY - Non-oxymoronic antonym of entropy.
3. GRAVITY - The equal and opposite reaction to acceleration.
4. INFINITESIMAL - As close to zero as humanly possible im-
  aginable or comprehensible. (Microzero, relative zero)
5. INFINITUDE - As close to infinity as humanly possible, imag-
  inable or comprehensible. (Microinfinity, relative infinity)
6. LIGHT - Part of electromagnetic spectrum in mencroscale
  perceptible to human eye & brain.
7. MASS - The unit-less sum of atomic weights of all atoms
  (number of protons & neutrons = 10100 approx.)
8. MENCROSACALE - Human range of perception, processing
  and presentation in our world.
9. OMNICENTRIC - In a universe of infinite radius every point
  is the center of the universe
10. PANTHROPTIMUM – (Contraction of PAN + ANTHROPic
    + OPTIMUM)
11. SPACE - 3D infinity of everything non-physical.
12. Time – Distance traversed divided by velocity of celestial
    body.
15. Yotta = 1024 (Reciprocal of Yocto 10-24)
16. Zetta = 1021 (Reciprocal of Zepto 10-21)
4. Instantaneous Gravity

Gravity is the equal and opposite reaction to acceleration. It is the application of Newton’s third law to acceleration. More precisely gravity is any and all uncompensated orbital (Hybrid straight line Linear & Angular/rotational) acceleration, however caused in three orthogonal-motion frames (i) The Earth orbit around the Sun in a first plane; (ii) The Sun orbit around the Black Hole of Milky Way in a second plane perpendicular to the first plane of earth orbit around the sun; and (iii) The Milky Way orbit around the black hole of the Virgo cluster of galaxies in a third plane perpendicular to first and second perpendicular planes analogous to three (or more) planes (or axes) of yaw, pitch and roll of an aircraft.

Gravity is local, instantaneous, in real time and most certainly not some spooky action at a distance. You have already created and experienced such an acceleration when accelerating or breaking a car. Recalling the definition above gravity is the equal and opposite reaction to such an acceleration or deceleration. Same is true of astronauts taking off vertically in a rocket, who feel ex-cruciating gravity downward. Unfortunately that is acceleration opposite reaction to such an acceleration or deceleration. Same is true of astronauts taking off vertically in a rocket, who feel ex-cruciating gravity downward. Unfortunately that is acceleration opposite reaction to such an acceleration or deceleration. Same is true of astronauts getting up or down. One can see that the pilot is integrating two motions; one ‘up or down’ along the vertical axis and another ‘in or out’ as the spiral narrows and widens. These two axes and concomitant planes are perpendicular to each other. Now imagine the Superman is accelerating the entire set up (with aircraft, pilot and all) forward along another horizontal axis. You will have to think a bit to see how the pilot would integrate three different accelerations to experience uniform gravity.

The following visualization exercise may help. Imagine a spiral in the shape of a Christmas tree, wherein an aircraft is spiraling up or down. One can see that the pilot is integrating two motions; one ‘up or down’ along the vertical axis and another ‘in or out’ as the spiral narrows and widens. These two axes and concomitant planes are perpendicular to each other. Now imagine the Superman is accelerating the entire set up (with aircraft, pilot and all) forward along another horizontal axis. You will have to think a bit to see how the pilot would integrate three different accelerations to experience uniform gravity.

![Fig. 1.](image1)

Fig. 1. Contact Force of Local and Physical Virtual Particles (Obviously not to scale nor proper orientation, inclination or direction)

![Fig. 2.](image2)

Fig. 2. Spiral motion for visualizing local 3D uniform gravity akin to yaw, pitch and roll of an aircraft?

The spiral graphic of Figure -2 downloaded with an attitude of gratitude for google from a public domain website (sites.google.com/site/translucentart/dotspiral2.jpg) may also help in visualizing how acceleration in three orthogonal axes or planes is integrated to provide uniform reaction to this acceleration as gravity in the opposite direction, a little bit like a centrifuge with a lower able floor often found in amusement parks where kids cling to the inside wall when the speed of the centrifuge exceeds a threshold and the floor is lowered but the kids remain stuck to the wall and seem to enjoy the surprising novel sensation.

Any theory of gravity, if based on motion at all, must also explain why don’t our brothers and sisters (Maits) down under in Australia fall off the planet when we all have our respective feet
planted firmly on the ground. In my nimble and humble mind it is a cop out to rationalize and suggest "because UGL (Newton’s Universal Gravitation Law) treats planet earth as a point particle”. Finally remember motion of the universe is the cause of gravity which is derived from common everyday human experience, to which we can all easily relate. Gravity does not make the world go around but world going around makes gravity go.

5. Let’s Not Make Waves

By this I mean let’s not make gravitational waves. Gravitational waves do not and cannot exist per se but LISA will detect some type of interaction of virtual via virtual particles and/or waves with the physical gold platinum cubes and laser beams and we/the will shape it into something at detectors, oscilloscopes and other transducers etc. Every viable and tenable theory of gravity must harmonize with our everyday experience of walking, riding a bike, driving a car, launching a satellite and once in a blue moon sending a man to the moon.

6. Physical and Virtual Light

Light is the Electromagnetic information collection and imparting system via virtual particles "Photons" through a unitary whole universal medium. It is part of electromagnetic spectrum in meniscoscale perceptible to human eye & brain. There are two types of light, physical and virtual. Physical light is the antonym of darkness - Subject to aberration, absorption, deflection, diffraction, dispersion, reflection, refraction and scattering etc., but Virtual light is not subject to any of these enumerated effects of aberration, absorption, deflection, dispersion, diffraction, reflection, refraction and scattering etc. Neither is visible. The only reason we see physical light is because its interaction with the physical makes this possible. The virtual light on the other hand is not perceptible even when it interacts or makes the physical light possible. The closest approximate synonym of virtual light is enlightenment, an “Aha” often experienced by creative people everywhere. Just as behind every successful man is a woman, behind every physical light is a unitary whole virtual light. Virtual light is also the key to finding the elusive TOE (Theory of Everything).

There is no such thing as traveling non-physical waves. E-M waves (including light waves) without a medium are fiction. In vacuum nothing travels at all. Neither sound nor light. Sound because it requires a physical medium to travel. Light because as a virtual entity it does not need to travel after all it is the virtual light that enables physical light. Light and sound speeds are oppositely related to density. Light speed decreases with density while sound speed increases with increasing density. Why the density affects sound and light oppositely is rooted in their physical and virtual nature respectively and can be better understood by a race between a jogger and a swimmer in a miniature land of ten thousand (actually 15,000/+ as in Minnesota) lakes where the jogger finds the increased number of lakes (density) as obstacle and slows down, while the Swimmer finds the lakes, conducive and speeds up.

Nothing travels at speed of light, not even light. No such thing as waves in non-physical medium. Light is mainly an electromagnetic information collection and imparting means via virtual particles "Photons" through a unitary whole universal medium. E-M waves (including light waves) without a medium are manmade concoction. In vacuum light does not travel at all as unitary whole comprises zero density and entails infinite speed. Either the speed approaches c’ or there is no travel at all.

The light appears to travel as waves in low density and interacts with the physical as photons. When the density decreases beyond a certain threshold, the appearance of waves is replaced completely by individual virtual particle (photon) interaction and when the density increases eventually even the photons are unable to get through steel or lead. It is the interaction of the virtual with the physical via virtual particles that creates the illusion of quantum physics. The only thing uncertain in the universe is the Heisenberg’s uncertainty principle itself.

7. URL: Universal Relationship Law

In this context URL does not mean. Universal Resource Locator as my URL is still the same OurPal.com but here it stands for Universal Relationships Law which is comparable in scope to Newton’s UGL (Universal Gravitation Law). Figure-3 is an overview of the Universal Relationship(s) Law.

<table>
<thead>
<tr>
<th>Velocity &gt; Vn</th>
<th>Velocity &lt; Vn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>Mass/Pendulum-Length</td>
</tr>
<tr>
<td>Clock Ticks Rate</td>
<td>Interval between Ticks</td>
</tr>
<tr>
<td>Time Contraction</td>
<td>Time Dilution</td>
</tr>
<tr>
<td>Aging/ Bio-Entropy</td>
<td>Volume, Size, Length</td>
</tr>
<tr>
<td>Order (Rate X Time)</td>
<td>Entropy (Rate X Time)</td>
</tr>
<tr>
<td>Conductance</td>
<td>Resistance</td>
</tr>
<tr>
<td>Gravity</td>
<td>Heat/Temperature</td>
</tr>
<tr>
<td>Energy</td>
<td>Momentum</td>
</tr>
</tbody>
</table>

Fig. 3. Universal Relationships Law

Many laws can be formulated from this simply by selecting any two variables and inserting ‘directly proportional’ if from the same column or ‘inversely proportional’ if from different columns between the two parameters to create a new law. Here the left column represents Range I for velocities between Vn (.00125c) and c’. Similarly Range II is for velocities between 0 and Vn (.00125c). The following graphic further delineates URL in these two ranges including the simplified formulas for gamma factor.

![Fig. 4. Simplified Linear Gamma Factor](image-url)

C = Speed of Light; V = Absolute Velocity
Ux = Value of Unknown Parameter at Velocity X (0-Vn)
Vn = Normal, Natural, Nominal velocity on earth @Rest
More on Definitions URL and Real Time Astronomy is available
on the World Science Database created and maintained by Natural Phi-
losophy Alliance. [1] Thank you, Greg Volk and David de Hilster. The
author’s website [2] also has useful additional information, which due
to space and time limitations I have not been able to touch upon and
delineate the topics further, which I could treat here only superficially at
the highest level of abstraction, but the devil is in the detail. Additional
graphics may also aid in grasping the counterintuitive and often contra
experience concepts. The following Figure 5 further delineates the
URL.

Fig. 4. In Twin Paradox Analysis, remember virtual don’t age &
dead don’t age. All properties (mass, motion, gravity, acceler-
ation, entropy and extropy mix) are ideal at Vn for the physical.

8. What about Time?

I define time as the ratio of distance traversed divided by
speed of celestial body in motion. Accordingly time dilation or
contraction is also function of the absolute motion of the universe
through absolute space. All motion must be taken into account
including rotation of the earth, its orbit around the sun and motion
of solar system and hence our earth also from Constellation
Aquarius to Leo at 370 km/sec. Like the three legged stool, mo-
ments (of time), mass and motion are interdependent and inex-
tricably intertwined. They are born together, grow proportionate-
ly together and will end together at speed approaching 0 or ‘c’
each having the same effect. The trio starts from infinite time (or
infinitiesal frequency) and infinitesimal mass and infinitesimal
motion. Time is also reciprocal of frequency. Time is also time
period of wave or wavelength. Accordingly in range I for Vn
(speeds between .00125C and C) as motion and mass approach
zero, time and frequency tend to infinity or end of everything
physical and end of time. Contrary to Einstein’s SRT in our range
I, time contraction takes place instead of time dilation. [3] In
range II (speeds between .00125C and 0) the opposite takes place.
As mass becomes zero, frequency becomes zero or time becomes
infinite to result in eternity (at par with infinite frequency, zero
time or end of time and end of physical variety eternity).

9. Real Time Astronomy

Perhaps the following contrived tongue in cheek dialogue be-
tween a skeptic and a scientist will help you appreciate the con-
cept & definition of real time and lag time.

Skeptic: But since presumably you were born and I look about half your
age, so I figured I can guesstimate how long will I live so I can
plan my life accordingly.

Scientist: About 14 billion years ago.

Skeptic: So I have about 7 billion more years to live on this planet. Thank
you Mr. Scientist. Thank you very much,..... very much indeed.

This dialogue delineates the folly of time lag astronomy. The
truth is we see stars as they are and now and not as they were.
I am not sure about you but when I gaze at the stars with wonder
amazement and reverence I see them as they are and not as they
were millions or billions of years ago. Universe operates, com-
municates and interacts with us in real time. The entire virtual
universe is a unitary whole. Reality of real time universe includ-
ing the real time astronomy is founded on the unity of truth and
one reality. Similarly sun spots on the sun are observed in Real
Time and not eight minutes later.

If the sun were to suddenly disappear the day will imme-
diately change to night on the entire planet, and the feeling of
gravity will vanish instantly and earth will fly off on a tangent
until it orbits some other appropriate celestial body in its straight
line acceleration because unlike light which slows down due to
the density of atmosphere, gravity is locally generated and does
not entail even the delay of a nanosecond. Real Time Astronomy
is not, cannot and will never become a look back at Big Bang.
Relationship between real time astronomy and quantum physics
is not a coincidence. Universe is not geocentric, heliocentric or
galactocentric, but is anthropic, anthroptimum, omnicentric and
anthropocentric as well as pananthropocentric.

10. Conclusion

There is but ONE reality, which supposedly science and reli-
gion and all other philosophies are pursuing. The reality of
science and religion should not, must not, cannot and will not be
different. It is absurd for either camp to think that they are com-
pletely right and the others are completely wrong. The real battle
is between good and evil and not between science and religion,
evolution and creation, male and female, us and them, patriotism
and humanity as good and evil people can be found in varying
proportions anywhere and everywhere.

Many of my friends in the main stream science criticize the
dissidents for being in denial of physical reality, but it does not
occur to them, that it may apply equally well to them as well.
They also criticize us (rising stars) for not publishing in peer re-
viewed journals, knowing very well that they are the sole gate-
keepers and therefore a self-fulfilling prophecy. One managing
editor even told me that, he would not waste the valuable time of
his technical editors by sending my manuscript for review simp-
ly because it disagrees with the proven science of icons like Aris-
totle, Galileo, Newton, Darwin and Einstein. So much for the
freedom of inquiry. If anyone challenges them their careers are
sabotaged and even slaughtered in some cases. [4]

References
[1] World Science Database Website, Natural Philosophy Alliance,
www.WorldSci.org
(2009).