

Re: Gravity and Magnetism

Source: <http://sci.tech-archive.net/Archive/sci.physics.relativity/2004-08/2984.html>

From: Oriel36 (geraldkelleher_at_hotmail.com)

Date: 08/14/04

Date: 14 Aug 2004 02:32:13 -0700

srp@microtec.net (Andr? Michaud) wrote in message
news:<562f286c.0408130838.bd18b7c@posting.google.com>...
> geraldkelleher@hotmail.com (Oriel36) wrote in message
news:<273f8e06.0408121144.12904cd0@posting.google.com>...
>> srp@microtec.net (Andr? Michaud) wrote in message
news:<562f286c.0408111852.44ab918d@posting.google.com>...
>>> geraldkelleher@hotmail.com (Oriel36) wrote in message
news:<273f8e06.0408111157.420e0f03@posting.google.com>...
>>>> srp@microtec.net (Andr? Michaud) wrote in message
news:<562f286c.0408101832.50d6b203@posting.google.com>...
>>>>> geraldkelleher@hotmail.com (Oriel36) wrote in message
news:<273f8e06.0408100757.7c68f58e@posting.google.com>...
>>>>>> Mr Michaud,
>>>>>>
>>>>>> Please be more careful with the attributions as I did not write the
>>>>>> posting you are responding to.
>>>>>>
>>>>>> I contribute to the newsgroup via Google.
>>>>>>
>>>>>> I clicked on the "post a reaction to that message" link at the
>>>>>> bottom of the proper message. This is how the contributor's text
>>>>>> got included in Google's answer frame, as usual.
>>>>>>
>>>>>> I typed my answer and clicked on the "post message" button as
>>>>>> usual.
>>>>>>
>>>>>> I have no idea how or why it then got assigned to a different post
>>>>>> in the thread.
>>>>>>
>>>>>> André Michaud
>>>>>>
>>>>>>
>>>>>> No problem Mr Michaud.
>>>>>>
>>>>>>
>>>>>> As for the crisis in physics that you refer to,well it is easy to
>>>>>> gauge that calculating heliocentric motion of the primary planets
>>>>>> cannot be attained by isolating the solar system seperate of its
>>>>>> motion about the galactic axis.It is clear enough how Newton viewed

>>>> *the effect that the other stars had on the solar system and to each
>>>> other.*
>>>>
>>>> *"Cor. 2. And since these stars are liable to no sensible parallax from
>>>> the annual motion of the earth, they can have no force, because of
>>>> their immense distance, to produce any sensible effect in our system.
>>>> Not to mention that the fixed stars, every where promiscuously
>>>> dispersed in the heavens, by their contrary actions destroy their
>>>> mutual actions, by Prop. LXX, Book I." [Principia]*
>>>>
>>>> *Despite the constant appeal to Newton in order to support the early
>>>> 20th century concepts, Newton does not speculate on 'universal centers'
>>>> nor does his gravitation agenda require such speculation. Even in the
>>>> most general terms, it should be clear enough to us in the 21st century
>>>> that the means by which Newton applied his gravitational agenda to
>>>> Keplerian motion would have been inadequate in his era never mind
>>>> ours. Much of it is due to his geocentric/heliocentric orbital
>>>> equivalency which started the framehopping game to the outright
>>>> unapologetic homocentricity of the early 20th century. It is much more
>>>> interesting to work off heliocentric modelling in conjunction with
>>>> galactic-centric modelling than backslide into
>>>> geocentricity/heliocentricity that forms the basis of Newton's
>>>> reasoning.*
>>>>
>>>> *"PHÆNOMENON IV.
>>>> That the fixed stars being at rest, the periodic times of the five
>>>> primary planets, and (whether of the sun about the earth, or) of the
>>>> earth about the sun, are in the sesquiplicate proportion of their mean
>>>> distances from the sun."*
>>>>
>>>> <http://members.tripod.com/~gravitee/phaenomena.htm>
>>>>
>>>> *From the perspective of astronomical forensics (and very few are
>>>> capable of this), the empirical method of isolating the orbital motion
>>>> of the primary planets within the solar system exclusive of the
>>>> effects of the independent motion of that system about the galactic
>>>> axis or indeed the independent axial rotation of the Earth within
>>>> orbital motion identifies why there is a presumed crisis in
>>>> physics. Simply stated, the concepts of the early 20th century are based
>>>> on an astronomical outlook no better or worse than Newton's 'fixed
>>>> stars' or 'indiscriminate motion of the stars' outlook.*
>>>>
>>>> *As the precepts which I use do not conflict with yours, for they are
>>>> altogether different, perhaps you may find advantages for being more
>>>> flexible on the matter of incorporating a greater rotation, in this
>>>> case circumgalactic rotation as an affect on the solar system and
>>>> planetary motion. The alternative is to remain with the isolated system
>>>> derived from Newton and expanded on in the early 20th century.*
>>>>
>>> *I am also convinced that the inner motion of the Solar System is
>>> influenced by the presence of the rest of our galaxy and at a larger*

> > > *scale by the motion of matter in the rest of the Universe. my conclusion*
> > > *is that gravitational attraction acts universally between each particle*
> > > *and all other opposite charge particles.*

> > >

> > > *Regarding Newton, although I think that his conclusions were right*
> > > *insofar as the data he had access to was concerned, I always keep*
> > > *in mind that in his time, electrostatic interaction (Coulomb) was*
> > > *still unknown and more importantly, that he could not have known*
> > > *that the Solar System was part of the larger rotating system that*
> > > *we know know is our Galaxy and that the universe was filled by*
> > > *millions of such galaxies.*

> > >

> > > *It remains possible for us however to extrapolate how his theory*
> > > *could be applied to the larger data set that we now know of.*

> > >

> >

> > *I feel that this is the intricate part insofar as the influence of*
> > *the Sun on planetary motion is dominant but to what degree the larger*
> > *motion of the planets and the Sun about the galactic axis influences*
> > *heliocentric motion of the planets would emerge from the notion that*
> > *in an isolated solar system, the motion of the planets about the Sun*
> > *would be circular and not vary its speed in accordance with Kepler's*
> > *second law.*

>

> *Jean Bernouilli is said to have demonstrated why planet's orbits can*
> *only be elliptical in 1710, in reaction to comments that Newton had*
> *not really answered Halley's question "What would be the resulting*
> *trajectory if it was admitted that the force of attraction varied*
> *with the inverse of the square of the distance?"*

>

> *It was said at the time that he had rather answered the question:*
> *"What must the law of variation of the force be, if the trajectory*
> *of a planet is elliptical?"*

>

> *I never could lay hand on Bernouilli's demonstration, however.*
> *I found it nowhere in print.*

>

I came across the same thing and I assure you that the closer to the era of Newton you get, the more pointed the argument becomes. In the following article Bernouilli is mentioned in terms of what the author terms 'the Method' and how to relate Newton to Kepler specifically.

<http://www.bodley.ox.ac.uk/cgi-bin/ilej/image1.pl?item=page&seq=2&size=1&id=bm.1861.11.x.90.553.x.593>

The author is troubled by what he sees as a case for stacking the deck in favor of Newton and downplaying Kepler in terms of the 'Method' which is a thingly disguised reference to the empirical method, while it would have raised eyebrows in 1844, today it would not even raise a single objection. This would all amount to a shrill lament of the state of investigation into natural phenomena if it were not for a modern

version of the same question.

If you look in sci.physics there is a discussion regarding the Sun and gravity and what would happen if the Sun disappeared. They are forgetting that the solar system is not isolated from motion about the galactic axis therefore the trajectory of a planet would remain conditioned by orbital galactic motion even if the Sun vanished. The point is that greater rotational effects overlap smaller rotations and condition the nature of orbits, in other words, not until galaxies and the nature of solar system rotation about the galactic axis was discovered could you answer the question of Keplerian motion.

> > *It is entirely reasonable given that hurricane development emerges
> > from dominant local causes but is influenced in structure and
> > formation by the Earth's axial rotation.*

>
> *Yes. Possibly.*

>
> > *That's what I tentatively did for my own personal satisfaction.*

> > >
> > > *I do not believe however that I could have found the final
> > > solution. What I think and say on this subject is merely my
> > > opinion.*

> >
> > *As a compromise, the next development and advancement on these matters
> > may simply be to open up ground where none exists at present, not in
> > such a way that the reader is swamped by information but that it is
> > more stable in linking one area to another, for instance, meteorology to
> > geology to astronomy in terms of rotations where one area compliments
> > the understanding of another. It is by no means idealistic but it is
> > natural and does not strain the imagination.*

>
> *I always thought that general synthesis were required once in
> a while.*

>
> > > *I happened to have had my attention more specifically drawn to
> > > infinitesimal physics rather than astronomical physics, although
> > > at the end of the day, the distinction definitely seemed to
> > > vanish.*

> > >
> >
> > *They would indeed vanish and there would be less hoopla over trying to
> > reconcile disjointed monolithic notions such as relativity/qm.*

>
> *Total agreement for these two.*

>
> > *I have worked on the premise that eventually explanations have to be
> > reduced to common language and although unfamiliarity with the material
> > is initially restricted to a few, ultimately nobody should have a problem
> > with moving from smaller celestial rotations to bigger ones or visa*

> > *versa.*

>

> *Absolute agreement.*

>

> > *It need not be all mud and crocidiles in this forum but it appears*

> > *that in defence of the novelties of the early 20th century, men are*

> > *prepared to waste their imagination and effort on men who knew no*

> > *better and knew nothing of stellar rotation about the galactic axis.*

> > *If they wish to reconcile the very large with the very small,there is*

> > *a better way to do it than adhering to 17th century reasoning and the*

> > *current correspondence seems the way to go.*

>

> *Agreement also.*

>

> *I am convinced that many of the concrete anchored premises of the past*

> *need be reconsidered in light of the pool of data that we now have at*

> *our disposal.*

>

> *André Michaud*

A good start would be a reformulation of the same question asked 3 centuries ago except in a modern format,what would the motion of the planets be about the Sun as they move simultaneously around the Sun and with and against galactic motion.I hope you will be the first to answer it.