

Re: Was Galileo Wrong?

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From: Earle Jones (earle.jones_at_comcast.net)

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In article <mb9wc.68\$45.11938@news.uchicago.edu>, mmeron@cars3.uchicago.edu wrote:

> In article <M_8wc.52204\$Ly.13384@attbi_s01>, "Robert J. Kolker"

> <robert_kolker@hotmail.com> writes:

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>> Earle Jones wrote:

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>>> *

>>> Einstein voted (1) – Newton, and (2) – Galileo:

>>>

>>> "In my opinion, the greatest creative geniuses are Galileo and
>>> Newton, whom I regard in a certain sense as forming a unity. And in
>>> this unity Newton is [the one] who has achieved the most imposing
>>> feat in the realm of science."

>>>

>>> A. Einstein (quoted in Moszkowski, *Conversations with Einstein*)

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>>> earle

>>> *

>>>

>> Two points.

>>

>> 1. Galileo did not completely free his thinking of Aristotelean issues.
>> His notion of inertia was not linear. Bodies attached to the surface of
>> the earth suddenly freed would maintain circular orbits.

>>

>> 2. Galileo was nowhere the mathematician that Newton was. There is
>> simply no comparison. While Galileo made good use of the math he knew,
>> Newton invented new kinds of mathematics, in particular calculus and
>> differential equations to handle motion.

>>

>> In this regard Newton is superior to Einstein who made superlative use
>> of mathematical tools invented by others. Einstein was smart to realized
>> that tensor analysis and Riemannian geometry was tailor made to express
>> his ideas about gravitation. However Einstein did not invent these tools
>> himself. Newton had to forge his mathematical tools de novo.

sci.physics: Re: Was Galileo Wrong?

> >
> *Yep, Newton was something quite unique (though, perhaps, Archimedes
> came close). As Alexander Pope wrote*
>
> *God said, "let Newton be"*
> *and there was light.*
>
> *I'm quoting from memory, so this may be inexact, but should be close.*

*
Close.

"Nature and Nature's laws lay hid in night:
God said, "Let Newton be!" and all was light."

—Alexander Pope
English poet and critic
(1688 – 1744)

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