

Re: Bohr's Atom still number one

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- *From:* "guskz@xxxxxxxxxxx" <guskz@xxxxxxxxxxx>
 - *Date:* 4 May 2007 00:51:00 -0700
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On May 2, 7:55 pm, bz <bz+...@xxxxxxxxxxxxxxxxxxxxxx> wrote:

"g...@xxxxxxxxxxx" <g...@xxxxxxxxxxx> wrote
innews:1178142990.583307.260730@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx:

Meaning as the electron approaches or moves away from the nucleus a photon is shed or absorbed.

Incorrect.

The position is not known well enough to be able to say that it moves toward or away from the nucleus at the time a photon is absorbed or emitted. The fact is that that the position of the electron is 'uncertain'.

All we know for sure is that the energy level of the electron(and the quantum numbers associated with the electron) change. The probability distribution changes. The AVERAGE distance from the nucleus changes. But the electron, itself, at the moment of emission, may very well NOT move at all.

Since they can isolate electrons (slit experiment) then likewise by now they should have figured out when the electron absorbs and when it emits light.

I believe it only occurs during acceleration and deceleration and nothing happens at constant velocities.

As well they total energy (including photons) of all reactions as elements turn into ions and vice-versa

We do know that in molecules, the positions of the nuclei do NOT change immediately. See the Frank-Condon Principle.

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And if I knock off planet Earth, the