

Re: Everything is made up of atoms, correct ?

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Source: <http://sci.tech-archive.net/Archive/sci.physics/2007-02/msg02654.html>

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 - *Date:* 16 Feb 2007 11:20:40 +1300
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"Morvak" <morvak@xxxxxxxx> wrote in news:1171560588.750969.275190@v33g2000cww.googlegroups.com:

At the most basic level, we and everything around us, in the universe, is nothing but tiny miniscule particles vibrating really really fast, correct?

That would be a reasonable description of baryonic matter and charged leptons. What science has learned is that this sort of stuff makes up only a lower percentage of the matter in the universe. The bulk appears to be material that interacts only via gravity. i.e we can't see it but know of its' existance only by the gravitational effect on matter we can see. See this article about "Dark matter".

http://en.wikipedia.org/wiki/Dark_matter

The dark matter may also be a miniscule particle (generically called a WIMP) but these particles don't notice the presence of electricity, magnetism or light.

So, what if we were able to actually see thigns at this scale?

Uncle Al referred you to some technology that that allows this. You can't directly see such scale with your eyes, as visible light is far too coarse. You also run into another problem. If we could directly see X rays and Gamma rays we would have the problem that when the wavelength is suitably small to resolve the object of interest, the photon energy is now sufficient to destroy what we want to look at.

Would we see nothing but atoms all around us? As I walk would I see air atoms around me that i easily move through?

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Atoms are mostly empty space.

And then if i were to sit on my chair, would i actually see a chair-shaped collection of densely grouped atoms ?

How did we evolve to see things as we do now, and not on the atomic level ?

Probably because the ambient light from the Sun peaks in the range that our eyes see. i.e we evolved to use what was available. I recall reading a science fiction story about beings made of degenerate matter who live on the surface of a neutron star. These beings are described as having their vision in the hard X ray range.

Could a creature exist that sees things on the atomic level, if not, why ?

Well in science fiction anyway ;-).

Klazmon.

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