

Re: Meanwhile, back in the lab...

Source: <http://sci.tech-archive.net/Archive/sci.physics/2005-05/msg02707.html>

- *From:* mmeron@xxxxxxxxxxxxxxxxxxxxx
 - *Date:* Fri, 20 May 2005 04:25:39 GMT
-

In article <d6jdu3\$t75\$1@xxxxxxxxxxxxxxxxxxxxxxxx>, glhansen@xxxxxxxxxxxxxxxxxxxxxxxx (Gregory L. Hansen) writes:

>In article <so7je.97\$25.20258@xxxxxxxxxxxxxxxxxxxx>,

> <mmeron@xxxxxxxxxxxxxxxxxxxx> wrote:

>>In article <d6isd1\$nvs\$1@xxxxxxxxxxxxxxxxxxxxxxxx>,

>>glhansen@xxxxxxxxxxxxxxxxxxxxxxxx (Gregory L. Hansen) writes:

>>>In article <v_5je.95\$25.20243@xxxxxxxxxxxxxxxxxxxx>,

>>> <mmeron@xxxxxxxxxxxxxxxxxxxx> wrote:

>>>>In article <d6i7e3\$h7v\$1@xxxxxxxxxxxxxxxxxxxxxxxx>,

>>>>glhansen@xxxxxxxxxxxxxxxxxxxxxxxx (Gregory L. Hansen) writes:

>>>>>In article <1116467397.252775.237190@xxxxxxxxxxxxxxxxxxxxxxxx>,

>>>>>Sbharris[at]sign[ix].netcom.com <sbharris@xxxxxxxxxxxx> wrote:

>>>>>>Greg, was my last question to you too difficult to answer off hand?

>>>>>>>

>>>>>>>The question I have is this: what happens when you run "few mev"

>>>>>>>protons or neutrons through single crystals of (say) graphite at small

>>>>>>>angles in comparison to the plane defined by the sheets of C atoms.

>>>>>>>With the beam passing orthogonally (the 001 direction) through the

>>>>>>>common plane defined by the stacked sheets, you'd get one attenuation

>>>>>>>coefficient. And presumably at right angles to that, so the particles

>>>>>>>were passing straight down the "alleys" between the sheets (the 112

>>>>>>>direction) you'd get another coefficient. In both cases these would

>>>>>>>related to the average density of the crystal in the direction of

>>>>>>>interest. But now, what happens when you tilt the thing just a little

>>>>>>>in either direction from 112??? Do the particles now go off greatly to

>>>>>>>one side or the other? And is the effective shielding coefficient per

>>>>>>>mass a LOT greater in the direction where the particles DON'T go, than

>>>>>>>you could get with other materials?

>>>>>>>

>>>>>

>>>>>

>>>>>>Sorry, I didn't see it before. I search for "hansen", so that's a sure

>>>>>>>way to catch my attention. Otherw