

Re: The strange quantum phenomenon known as supersolidity

Re: The strange quantum phenomenon known as supersolidity

Source: <http://sci.tech-archive.net/Archive/sci.physics/2007-07/msg01164.html>

- *From:* "Tomoko Kanazawa" <T.Kanazawa@xxxxxxxxxxxxxxxxxxxxxx>
 - *Date:* Tue, 17 Jul 2007 22:22:45 -0500
-

"Sam Wormley" <swormley1@xxxxxxxxxx> wrote in message
[news:WZ3ni.13808\\$Xa3.7165@xxxxxxxxxxxxxx](news:WZ3ni.13808$Xa3.7165@xxxxxxxxxxxxxx)

malibu wrote:

On Jul 17, 6:14 am, Sam Wormley <sworml...@xxxxxxxxxx> wrote:

PHYSICAL REVIEW FOCUS 16 July 2007

<http://focus.aps.org/>

David Ehrenstein, American Physical Society

Introductions to the Focus stories of the past week;
visit <http://focus.aps.org> for the complete stories.

SUPERSOLID, WITH A TWIST

The strange quantum phenomenon known as supersolidity occurs when atoms flow without friction through a solid block

of helium, possibly along a network of defects extending through

an otherwise perfect crystal. In an upcoming issue of Physical

Review Letters, physicists find such a flow in computer simulations

even when the atoms that make up the defects form a regular pattern, unlike the disorderly arrangement used in previous calculations. The results open a new way of understanding this

extraordinary state of matter, which has properties of both solids

and liquids.

(M Boninsegni et al., Phys. Rev. Lett. to be published)

COMPLETE Focus story at <http://focus.aps.org/story/v20/st3>

Copyright 2007, The American Physical Society.

Re: The strange quantum phenomenon known as supersolidity

When you have a theory that gives strange results,
and you plug it into a computer.....
voila!!....
garbage in- garbage out.

John

Strange results are at the heart of science John... otherwise it
would be dead!

Neat story Sam.

Good one.