

"It looks interesting"

By: [Mats Lewan](#)

Published January 21, 2011 12:48

[69 comments](#)

"I think it seems exciting. They are at least serious," says physicist Hanno Essén the Italian demonstration of a possible cold fusion.

(UPDATED at 14:10).

- It looks interesting. Just that it is reproducible, that they actually built a solid unit. It's new, says Hanno Essén, associate professor of theoretical physics and professor at KTH.

He explains that experiments with cold fusion would normally be difficult to repeat, and that they provide very small amounts of net energy.

The uncertainty he sees in the Italian experiment is whether one could verify that there was no combustion.

- If you can rule out the combustion as demonstrated, I do not know.

Hanno Essén also looked through the [descriptive article](#) by the Italian scientists Andrea Rossi and Sergio Focardi wrote, but turned down by established scientific journals, because it does not provide a complete physical explanation of the process.

- It is certainly true physics. So much to be said.

His own hypothesis about which physical phenomena that may be involved relating to so-called relativistic electrons, ie electrons traveling at about 80 percent of the speed of light or more.

- By heating a metal may be a kind of plasma with "runaway electrons". And it has relativistic electrons, we must not only electrostatic forces but also electromagnetic, which can affect the Coulomb barrier, he explained.

(*Coulomb barrier is the barrier of electrostatic forces in two nuclei have to overcome to get close enough for a nuclear reaction. Reds notes*).

Hanno Essén has written [an article about the relativistic electrons and cold fusion](#) . The article is published in the free community arxiv.org at Cornell University.

- It was met with silence, he says, and mentions the same time [Nobel laureate Julian Schwinger](#) who was mocked for a number of articles about cold fusion from 1989 onwards.

- But there is no reason to be dogmatic, I think, especially when dealing with plasmas that are very poorly understood, says Hanno Essén.

[Read about the scientific observers' reports and a variety of other tasks related to the experiment.](#)

By: [Mats Lewan](#)[Email reporter](#)[Follow the Reporter on](#)[Twitter](#)

New Technique's daily newsletter - Sign now for free!