

From: Jeanne Norberg <jnorberg@purdue.edu>
Subject: Re: Message forwarded from S.Krivit (rpt->j.norberg;3/8/06)
Date: Thu, 9 Mar 2006 17:31:04 -0500
Steve Krivit, Rusi Taleyarkhan

[JN] Steve, I've tried to answer those questions that I know answers to from the university's perspective.

[SK] To your knowledge did anybody from Nature make any attempt to contact you about this story to ask you any questions about it or to get your side of the story? If so, when?

[JN] I assume this is a question for Rusi. As for me, no one from Nature contacted the Purdue News Service before the story appeared. I do not know if anyone else besides those quoted knew that it was coming.

[SK] When did you first learn about the Nature story?

[JN] When the NYT called at about noon Tuesday and asked for a statement, which we provided from our Provost Sally Mason: Purdue last week initiated a review of this research and the allegations related to it. The research claims involved are very significant and the concerns expressed are extremely serious. Purdue will explore all aspects of the situation thoroughly and announce the results at the appropriate time. To ensure objectivity, the review is being conducted by Purdue's Office of the Vice President for Research, which is separate from the College of Engineering.

[SK] Can you tell me about that?

[JN] Because the embargo for the Nature story was 8 a.m. Wednesday, the NYT reporter couldn't refer to it in his article for that morning's edition. So he turned the Purdue statement into the story, which then ran without the context of the fact that it was a response, not an announcement. While Purdue chose to use the word "review" in its statement, the reporter and headline writer chose the word "investigate."

Consequently the story, which appeared without context, looked as though Purdue had announced it was investigating the the researcher. That was not the case. Unfortunately, many media then carried that story.

[SK] Do you have any idea how this story in Nature started or how it was initiated?

[JN] no. You can reach the Nature writer at: eugenie.reich@gmail.com

As a side note, our news release on this is:

<http://news.uns.purdue.edu/UNS/html3month/2006/060308.Mason.fusion.html>

[SK] The Nature story reports this:

"Data claimed in January to be evidence for bubble fusion are actually a much better match for the radioactive decay of a standard lab source - by a factor of more than 100 million."

and references this graph:

<5860740b.jpg>

and this text and web link.

"The detection spectrum of neutrons from a fusion reaction has a hump, and then dies down to zero. Naranjo et al. Nature 434, 1115-1117'

"The fusion of deuterium nuclei produces neutrons that have a particular energy of 2.45 mega-electronvolts (MeV). "The published spectrum is totally inconsistent with that of 2.45 MeV neutrons, raising doubt over the fusion claim," says Naranjo.

"The spectrum for such neutrons should have a hump in the middle and a sharp cut-off at higher energies. Yet both features are strikingly absent from Taleyarkhan's data, Naranjo says. The probability of getting a spectrum that is such a poor match for neutrons produced by fusion is one in more than 100 million - virtually impossible, Naranjo calculates."

Can you comment on these quotes above?

Other questions -

In the simplest terms possible, what is the likelihood that the interpretation of your results could have been misinterpreted by the presence of californium? Are the energies or particle types from californium similar or different from the particles given off by your experiment?

How easy or difficult is it to distinguish emissions from californium versus those from your experiment?

Was Naranjo's analysis based on his own experiment or a computer simulation?

One of my sources tells me that the entire world's yearly production of californium is a few milligrams. About how much of it was in your laboratory?

What was the proximity of the source to your experiment?

Is there any possibility that you or your lab people were using californium at the same time as your bubble fusion work?

If so, what is, and was the normal handling precautions that you used to prevent stray emissions from contaminating other data being taken?

When the californium was not being used, is it protected from being emitted to the surrounding areas?

Another source believes that your device is "far more robust, than Putterman's and has far greater potential to commercialize." Can you comment on that?

Thanks,

Steve