

# Another Higgs rumor reminds us how science is correctly done

April 25 2011, by Lisa Zyga

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The Atlas detector at the LHC at CERN in Geneva, Switzerland. Image credit: LHC.

(PhysOrg.com) -- With the Large Hadron Collider (LHC) running smoothly for well over a year now, the excitement surrounding the possibility for the discovery of new physics has generated a few rumors - speculations that have not been published in peer-reviewed journals. The latest came last week, when an anonymous person posted the abstract of a note on Columbia University mathematician Peter Woit's blog that claimed an intriguing observation.

The [abstract](#), which comes from an internal note from the [ATLAS experiment](#) at [CERN](#), claims to have observed a resonance at 115 GeV.

“This large enhancement over the [standard model](#) rate implies that the

present result is the first definitive observation of physics beyond the standard model,” the memo says. “Exciting new physics, including new particles, may be expected to be found in the very near future.”

As [Woit noted](#), the resonance could signify the much anticipated [Higgs boson](#): “It’s the sort of thing you would expect to see if there were a Higgs at that mass, but the number of events seen is about 30 times more than the standard model would predict.”

When the Nature blog [The Great Beyond](#) asked ATLAS spokesperson Fabiola Gianotti about the rumor, she said that these kinds of signals frequently appear during data analysis, and are later falsified after more detailed scrutiny.

“Only official ATLAS results, i.e. results that have undergone all the necessary scientific checks by the Collaboration, should be taken seriously,” she said.

Other scientists have emphasized that it’s simply unscientific to publicly discuss internal material before the collaboration officially publishes a result. In the case of ATLAS, the collaboration involves 3,000 scientists from around the world who work together to analyze every detail of the data.

So why publicize the rumors in the first place? For Woit, who decided to write a full blog post on the comment he received, the reason is to expose the rumor for what it is.

“I’ve generally taken the point of view that it’s not my job to stop rumors, but rather to put out accurate information about them when available to me,” he wrote.

In the meantime, everyone not involved in the ATLAS collaboration

might just let those scientists do their work in peace, and wait patiently for an official publication before discussing the research.

**More information:** via: [Discovery News](#)

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