

# Rumblings about CERN is empty talk

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'Hadron Collider to be closed amid fears of a very big bang' read the headline in a major English newspaper and sparked controversy over the future of CERN. Was there a future for the large European research center?

"It is a controversy that has partially been created by a document sent out by the General Director of CERN, Rolf Heuer, and which was quoted incorrectly in a sensationalist headline. In the article itself, you can easily see that it is only talking about taking a limited break", explain particle physicist at the Niels Bohr Institute, Hans Bøggild, who is the Danish member CERN's scientific council.

## Half power - half price

The fact is that the giant particle accelerator, the LHC, is going to be



shut down for a period of six months to a year, but that won't happen until 2012 and has been the plan since a meeting in January, when it was also decided that during the next two years the accelerator will 'only' run at energies that are half of the maximum energies the particle accelerator is capable of. This is being done because a longer break is required to make the machine ready for the next big jump in energy levels, so absolutely no chances for an accident are being taken.

"Some countries think that they should only have to pay half of their contingent for membership of CERN", says Hans Bøggild, explaining that in England there been cuts in the budget of the scientific research council, so they are trying to find a reason to reduce the payment.

#### **Dispute over money**

The reason is that five countries are seeking to become members of CERN, which currently has 20 (soon to be 21) member countries. These are Cyprus, Turkey, Serbia, Slovenia and Israel and the scientific council will be discussing the decision later this month. If the new countries join there will also be new revenue and while some countries think that the money should be used to improve the scientific research opportunities, there are countries with hard-pressed economies who think that the extra funds should be used to reduce the contingent.

Whether the decision goes one way or the other, the winner is entirely up to the members of <u>CERN</u>'s scientific council (as representatives of the member countries). There is an important meeting later in the month. "And it is a fight that has burst out into the open", explains Hans Bøggild.

### **Groundbreaking discoveries**



The LHC accelerator has been started up again after several months of the winter closure and in a month will run for the first time at energies of 7 TeV, which is a new and incredibly exciting energy area.

"It is the world's most powerful <u>particle accelerator</u> and the potential is fantastic", explains Hans Bøggild and adds that the experiments during the next two years could result in groundbreaking new scientific discoveries such as super symmetry, the universe's mysterious dark matter and the Higgs particle - the missing piece in the puzzle of nature, the so-called Standard Model.

#### Provided by Niels Bohr Institute

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