

# EUROPEAN PHYSICAL SOCIETY

## High Energy Particle Physics Board

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Your reference  
Our reference

Herrn Bundesminister  
Dr. Johannes Hahn  
Bundesministerium für  
Wissenschaft und Forschung  
Minoritenplatz 5  
1014 WIEN

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### **Austria withdrawing from CERN?**

Dear Bundesminister,

We, the High Energy Particle Physics Board of the European Physical Society (EPS-HEPP), are severely concerned about the announced withdrawal of Austria as a member state of CERN, the European Laboratory for Particle Physics. Such a decision is particularly surprising and unexpected at a point in time that the particle physics community worldwide is awaiting new discoveries to be made with the Large Hadron Collider. This particle accelerator, the world's largest and most powerful, is planned to start operation in the fall of this year.

Fundamental basic research such as particle physics carried out at CERN can only be addressed in international European and world wide collaborations. Founded in 1954 as the European center for nuclear and particle physics, CERN's research has now brought Europe to lead this eminent field of frontier science. The LHC and its detectors, unique scientific instruments, have been built in a worldwide collaboration with European leadership in which the Austrian scientists played an important role. As an example, Austrian physicists have contributed much to the development and construction of the central component and the fast reaction analyzer (trigger) of the large CMS experiment.

The soon to start experiments will study reactions under laboratory conditions which were relevant in the early universe a million millionth second after the big bang. Being of fundamental and important nature on its own grounds, the technical developments necessary for such endeavors have brought out innovations now used way beyond particle physics research, the most prominent examples being the World Wide Web and the cancer treatment of deeply lying tumors with highly effective particle beams.

The uniqueness of CERN as a European effort rests on the united collaboration of the European countries. Due to its success and attractiveness many non-European countries have sought partnership with CERN, most prominently the USA and Russia. Many developing nations are ambitious to join CERN to participate in this truly international and fundamental research. Austria joined CERN as the 13th member state in 1959, since 1999 there are 20 member states.

A key element in a useful multi-national (European) collaboration is trust and common long-range goals. An abrupt withdrawal from one such collaboration could make it very difficult to build trust for a new collaboration.

Austria's withdrawal from CERN would run exactly opposite to this international

drive of scientific cooperation in fundamental research. It would in our strong opinion give the wrong signal at a wrong time and it would cut the successful and recognized scientific contribution of Austrian science to this field.

Yours sincerely,

Per Osland  
EPS HEPP Chair

cc: Dr. David Lee, Secretary General, EPS