

Bundesminister Dr Johannes Hahn
Bundesministerium für Wissenschaft
und Forschung
Minoritenplatz 5
A – 1010 Wien

ECFA/Secr./09/1522

Geneva, 11 May 2009

Dear Bundesminister Dr Hahn,

I am writing this letter as Chairman of the European Committee for Future Accelerators (ECFA) that, among other tasks, monitors the development of national particle physics communities in the CERN member states.

ECFA has noted with shock the announcement of the Austrian government to leave CERN. As this decision strongly affects the particle physics landscape in Europe ECFA will discuss this issue during upcoming meetings but I feel that it may be of some value for you to receive a timely response from the ECFA chairman. My statements are based on information collected during visits of the committee to all CERN member states and in particular also on the knowledge we have about the particle physics community in your country. I would be more than happy if this letter contributes to a process of revising this unfortunate decision.

CERN is a laboratory dedicated to address the most fundamental questions to nature but at the same time requires cutting edge technologies to perform the complex measurements. In a truly worldwide effort during the last 15 years CERN has constructed a machine, the LHC, which represents one of the largest and most ambitious scientific undertakings of humankind. All international contributors have invested substantial funds and, more importantly, enormous intellectual efforts into this project. On top of the Austrian CERN membership contribution your ministry from 1996 to 2011 has committed an investment in material and personnel costs in excess of 25 Million Euro into the construction of the CMS experiment, to mention just Austrias most visible contribution to LHC detectors. With those funds very essential contributions to the high speed decision logic (trigger) and the solid state sensor tracking systems have been realised. All components are crucial to the success of CMS. It appears obvious that Austrian physicists are now eager to harvest the fruits of their hard and dedicated work over so many years. They are very well prepared to do so. An excellent experimental group at the HEPHY in Vienna is complemented by 6 other institutes in Vienna, Innsbruck and Graz forming a well balanced renowned cluster of experts in instrumentation,

high performance computing, physics analysis, theoretical physics and, very importantly, cosmic physics which is intimately linked to the fundamental physics addressed at the LHC. The complete particle physics programme in Austria goes far beyond the CMS participation alone and includes other CERN experiments like ATLAS as well as research projects in Japan and the US.

Particle physics offers a unique combination of basic science with high technology. Austrian industry has developed and built major components of the LHC and its experiments and spin-offs like the MEDAustron project provide applied and short term feedback to society.

Leaving CERN would also break the very successful relationship with Austrian industry. During the period of the LHC construction Austrian industries were awarded contracts in excess of 73 Million Euros representing a direct return of 70% of Austrian contribution to CERN's material budget.

A withdrawal from CERN would however most strongly hit the young generation of Austrian physicists and their future prospects. CERN is an attractor for excellent young minds in physics and related technologies. Their constant exchange of ideas and their scientific and social communication beyond all geographic and political borders has been and will be an archetype for a modern and globalised world. Austria in particular has been a pioneer in making the excellence at CERN accessible to students in technical fields. The technical fellowship programme initiated by your country has been a prototype for similar programmes elsewhere, for example the Gentner-Programme in Germany.

Dear Minister, in the name of the European particle physics community I urge you to consider revising your decision and let Austria remain an active member of CERN in these truly exciting times with wonderful physics ahead of us after so many years of hard work. Should you need any further detailed information about the Austrian particle physics community in the context of the European and the international framework, ECFA will be more than happy to make all its acquired competence available to your ministry.

Yours respectfully,

Prof. Dr Karlheinz Meier
Chairman of ECFA

Cc: Mr J. Sorger