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Sent in electronic format only

ECFA/Secr/22/2018

Geneva, 21 April 2022

Dear Minister,

It was a great pleasure for the European Committee for Future Accelerators (ECFA) to visit Germany on 1 and 2 April 2022. The purpose of the ECFA visits, which are made to each of CERN's Member States in turn, is to assess particle physics and related disciplines in the country concerned and to suggest improvements. The recommendations made are addressed to both the physics community and the government.

Please find enclosed a brief summary of our recommendations together with a more extensive letter in which we elaborate on these points.

- Germany is a stronghold of particle physics in Europe, and ECFA is very impressed by its vibrant community, broad science programme and many high-quality contributions to front-line research in particle, astroparticle and nuclear physics.
- The achievements of German institutes rely on sustained and solid funding by BMBF. In particular, the funding via the collaborative research structures (*Verbundforschung*, via FSPs in the ErUM-Pro and ErUM-Data programmes) is essential to enable German universities to participate in world-leading science programmes in particle physics.

Cooperation and funding are well complemented by strong participation by the Helmholtz Association and the Max Planck Society as well as by support via the *Deutsche Forschungsgemeinschaft* (DFG). DESY, in particular, plays a very prominent role in supporting particle physics activities and universities in Germany in computing and technical areas.

The funding of large detector upgrade projects via dedicated BMBF and Helmholtz infrastructure programmes is very successful and we suggest applying such a funding model for future upgrades too.

- CERN is the central laboratory for the German particle physics community. Together with CERN, more efforts should be made to increase the proportion of Germans among the CERN-employed personnel, in particular in the technical and engineering departments, where CERN offers multiple opportunities.
- A particular strength of the German particle physics community is the large number of PhD students. We recommend that efforts should be made to keep the number at the present level with adequate salaries. In addition, we encourage the exploration and implementation of mitigation measures to increase the rather low number of permanent scientist positions in universities.
- Finally, we suggest that DESY should consider taking an even stronger role as a national support centre ("national hub") in the technology areas of detector and accelerator research and development, following successful examples in other European countries.

In conclusion, ECFA is very impressed with the high quality of the activities of the German particle physics community and warmly acknowledges the government's ongoing support for those activities.

Yours sincerely,

K. Jakoj

Karl Jakobs Chair of ECFA

cc: Dr Volkmar Dietz, Ministerialdirigent, BMBF
RD Eckart Lilienthal, Referatsleiter, BMBF
Dr Friederike Trimborn-Witthaut, Referatsleiterin, BMBF
Dr Johanna Kowol-Santen, Gruppenleiterin Physik und Chemie, DFG
Professor Otmar D. Wiestler, Präsident der Helmholtz-Gemeinschaft
Professor Beate Heinemann, Direktorin für den Forschungsbereich Teilchenphysik, DESY
Professor Klaus Blaum, Vizepräsident, MPG
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