

Call for contribution of expertise

CERN invites collaborating institutes and universities to contribute with the expertise of their qualified employees to the activity described below.

Start date: asap

Duration: One year, possible extension to a maximum of up to 3 years.

Project/Activity: Electrical Engineer

Detailed description of Activity:

The expert will join the TE-MPE group. The main tasks will be the following:

- Global optimization of the HL-LHC Circuits having in mind performance, operation and cost, considering the number of circuits and the different powering and protection configurations that are possible within the LHC and HL-LHC constraints.
- Investigation on the various solutions considering aspects in the domain of Accelerator Physics and Performance, S.C. Magnets Design, Cold-Warm Powering, Machine Protection, Cryogenics, Integration and Installation issues.
- Preparation of the strategies and related documents pertaining to the monitoring of the quality of insulations of the electrical circuits during construction, test and hardware commissioning for all circuit components.
- Organization of technical and global reviews on aspects of the design of the different systems related to interfaces and having an impact on the overall, operational performance and costs.

Profile: Master degree in electrical and/or energy engineering

Specific details: Candidates will be expected to possess a good working knowledge of either English or French. Documentation shall be produced in English.

Experience with systems approach in the domain of superconducting magnets, their powering and protection will be highly appreciated.

Status at CERN: Associated Member of the Personnel (Project Associate).

Conditions in accordance with CERN's Staff Rules and Regulations and Administrative Circular No. 11. Subsistence allowance is payable by CERN to cover the additional cost arising from the individual's (and, as applicable, their family's) stay in the local area while performing activities at CERN.

Option: Collaborating institutes and universities can propose to support the activity of the qualified employees participating in this "Call for contribution of expertise" with students or other employees. Their status and Subsistence allowance when applicable will be adapted to their relation with their institutions

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