

Call for contribution of expertise

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

Start date: 01.12.2020

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

Project/Activity: Monitoring and calculation of HL-LHC radiation environment and levels

Detailed description of Activity:

- Evaluation of the HL-LHC radiation environment, both via radiation monitoring information from the present machine, and simulations (mainly FLUKA Monte Carlo) for the future HL-LHC configuration;
- Integration of radiation level estimates in related specifications and Radiation Hardness Assurance approach for radiation tolerant systems;
- Iteration with various equipment groups and HL-LHC integration related to radiation level and requirement aspects.

Profile: Master degree in physics, electronics engineering or equivalent technical experience. General knowledge of radiation-matter interaction and radiation effects on electronics. Experience with Monte Carlo simulation tools and/or radiation detectors is a plus.

Specific details: Diplomacy and excellent team-working attitude. Good working knowledge of either English or French.

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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Reference: 2020_Q2_008_WP10_Radiation