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| <h2>Call for contribution of expertise</h2> <p>CERN invites collaborating institutes and universities to contribute the expertise of their qualified employees to the activity described below.</p>  |   |
| <p><i>Start date:</i> Mid-2018</p>   | <p><i>Duration:</i> One year, possible extension to a maximum of up to three years.</p> |
| <p><i>Project/Activity:</i> Accelerator physicist in the domain of hadron beam collimation</p>   |   |
| <p><i>Detailed description of Activity:</i></p> <ul style="list-style-type: none"> <li>• Perform accelerator physics simulations for various aspects of the baseline upgrade scenario that will be implemented in the LHC, as part of the HL-LHC upgrade project, during the Long Shutdown 2 (LS2), including also participation to the follow of the production process for WP5 items.</li> <li>• Participate to relevant beam dynamics measurement activities addressing potential limitations relevant for HL-LHC, including for example quench tests, impedance measurements, collimation losses and halos;</li> <li>• Participate to measurements and simulations of beam halo dynamics at the LHC;</li> <li>• Participate to the definition and performance assessment of non-baseline upgrade scenarios, like crystal collimation and hollow e-lenses.</li> </ul> |   |
| <p><i>Profile:</i> University degree in physics or engineering. Preferably, PhD in applied or accelerator physics. Proven experience in accelerator physics and/or data analysis and processing.</p> <p><i>Specific details:</i> Knowledge of optics and of collimation systems; optics and tracking tools like MADX and SixTrack; experience with data analysis and modelling. Good working knowledge of either English or French.</p>  |   |
| <p><i>Status at CERN:</i> Associated Member of the Personnel (Project Associate).</p> <p>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.</p>   |   |
| <p><i>Option:</i> 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</p>   |   |
| <p><i>Contact person:</i> Isabel Bejar Alonso</p>  | <p><i>Reference:</i> 2017_Q3_024_WP5_Accelerator_Physicist</p>                          |