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Dear Leadership Group at the Department of Physics and Astronomy,

Following the creation of a search group towards a senior lecturer position in accelerator physics in the high-energy physics (HEP) program, we hereby provide a summary of our investigations into potential candidates, both at Uppsala University and other institutions. It should first be noted that the scientific merits in accelerator physics are quite different when compared to other research disciplines. For instance, accelerator physicists usually have fewer peer-review articles but more conference proceedings than other researchers. Also, because accelerator physics is usually conducted at research laboratories rather than at universities, there are often more limited teaching opportunities for such researchers. Although we do not expect a very large pool of applicants, there are nevertheless some recognised experts in accelerator physics, both at Uppsala University and other European institutes, with the appropriate teaching merits.

Starting with internal candidates, Maja Olvegård and Marek Jacewicz are two members of the FREIA division with the scientific expertise required for this position as they have both worked on future collider projects (e.g. CLIC, HL-LHC) over several years. The accelerator physics projects that Maja and Marek have been involved with also gave both of them an excellent international exposure. In addition, they have both acquired extensive teaching experience that match the requirements of a senior lecturer position.

In Sweden, many accelerator physicists work at the European Spallation Source (ESS) or Max-IV, both in Lund. Our investigations concluded that some of them also have teaching experience at Lund University or in previous positions. Although not currently involved in HEP projects, such potential candidates include:

- Mohammad Eshraqi, accelerator physicist with several leadership positions at the ESS. He has been guest lecturer at Lund University and supervised master and PhD students;
- Natalia Milas, accelerator physicist at the ESS. Her teaching experience as lecturer is unclear but she has supervised numerous students at master level;
- Stephen Molloy, accelerator physicist who worked at the ESS and now at Max-IV. He has been a lecturer at Royal Holloway (UK) and also at Lund University.

Research staff at Stockholm University working on accelerator projects and with documented teaching experience in accelerator physics include Fredrik Hellberg, who works on the European XFEL.

The European Laboratory for Particle Physics (CERN) in Geneva hosts some of the best experts in accelerator physics in the world, however most of them either already have a permanent position or have not significantly been exposed to teaching duties. One exception is those colleagues who teach at some of the schools that are organised by or in close collaboration with CERN (such as the annual Joint University Accelerator School, JUAS, to name only one). Lotta Mether (originally from Finland) is one of such expert researchers, whose current five-year contract at CERN expires soon and who has teaching experience.

A non-exhaustive list of other potential candidates at other European institutes can be found below:

- Robert Heine, academic staff member and accelerator physicist at JGU Mainz (Germany) with habilitation (and therefore demonstrated teaching experience);
- Bastian Härer, scientist at KIT (Germany), who earlier worked on future HEP collider projects at CERN and is now giving parts of the accelerator physics lectures.
- Markus Schwarz, scientist at KIT (Germany), who also earlier worked at CERN and is now involved in the student courses on accelerator physics
- Tiina Salmi, academy research fellow at Tampere University (Finland): excellent track record in future HEP colliders, but unclear teaching experience.

In conclusion, although researchers in accelerator physics often have less teaching opportunities because they are employed by research institutes, the search group has identified a dozen of very good potential candidates (of which four are women) with both research and teaching merits, locally at Uppsala University, as well as in other universities in Swedish and abroad.

Best regards,

Arnaud FERRARI, Uppsala University (head of the search group),  
Susanne MIRBT, Uppsala University,  
Johan SÖDERSTRÖM, Uppsala University,  
Sverker WERIN, Max-IV, Lund