Contribution ID: **203** Type: **Invited Talk**

The high-intensity muon beam (HIMB) project at PSI

Monday 17 October 2022 09:05 (30 minutes)

At the Paul Scherrer Institut (PSI) muon rates of up several 10^8 μ^+/s are available, produced by its 1.4 MW proton accelerator complex HIPA. While these are currently among the highest muon rates available worldwide, projects in the US and Japan are underway that will be able to surpass these intensities by several orders of magnitude.
In order to maintain PSI's position at the intensity frontier in muon physics, to utilise the unique DC machine structure and to offer exciting new possibilities for particle physics and materials science, a project has started to create a next-generation muon beam by modifying the existing Target M station and attached beamlines. Simulations showed that surface muon rates of the order of 10^10 μ^+/s can be achieved by placing two normal-conducting capture solenoids close to a slanted graphite target and transporting the muons to the experimental areas with a beamline consisting of large-aperture solenoids and dipoles.
This contribution will present the current status of the project and the next steps towards its realisation.

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Session Classification: Session