

Discussion on future muon programs

Andreas Crivellin and Angela Papa
Workshop Exploring BSM physics with Muons
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Focus questions:

Q1: Muon physics at low and high energy

- What overlaps exist to BSM physics at low and high energy with muons?
- How would these manifest in both the near term muon/precision measurements sector & future facilities/muon collider?

Q2: Machine/ Beam/ Detector Design

- Are the ultimate sensitivities really exploited with current facilities?
- How can we improve experiments without increasing the beam power?
- What will be the ultimate sensitivity that we can reach even by increasing beam power/intensity, and what are its implications?
- What will be the limit for the achievable sensitivity even at these new intensity frontiers?
- Cooled muon beams? New methods?
- New experimental techniques?

Q3: Program planning

- How do we support the physics needs at intensity frontiers (both DC and pulsed beam structures) in the planning (and cost) of new facilities/muon collider?
- How can muon physics benefit from future facilities/muon collider and viceversa?
- Could new ideas from muon physics developments turn out to be useful for future facilities/muon collider and viceversa?

Collaboration Japan-Switzerland

- Quick introduction by Post-Docs about their research interests
- Identification of possible overlap