welcome to the

FUTURE COLLIDERS SEMINAR SERIES

To take place on a ~monthly basis, on Tuesday at 11am

Next seminar: May 2

Organizers:
• M. Aleksa (FCC PED Coordination Board)
• J. List (ILC Exec Board)
• M. Mangano (FCC Coord Board)
• D. Schulte (Study Leader, International Muon Collider Collaboration IMCC)
• S. Stapnes (ILC Exec Board and chair of IMCC steering board)
• F. Zimmermann (FCC deputy leader)
“An electron-positron Higgs factory is the highest-priority next collider”

“Europe, together with its international partners, should investigate the technical and financial feasibility of a future hadron collider at CERN with a centre-of-mass energy of at least 100 TeV and with an electron-positron Higgs and electroweak factory as a possible first stage. “

“[…] the accelerator R&D roadmap could contain:

- the R&D for an effective breakthrough in plasma acceleration schemes (with laser and/or driving beams), as a fundamental step toward future linear colliders, possibly through intermediate achievements: e.g. building plasma-based free-electron lasers (FEL). Developments for compact facilities with a wide variety of applications, in medicine, photonics, etc., compatible with university capacities and small and medium-sized laboratories are promising;

- an international design study for a muon collider, as it represents a unique opportunity to achieve a multi- TeV energy domain beyond the reach of e+e– colliders, and potentially within a more compact circular tunnel than for a hadron collider. The biggest challenge remains to produce an intense beam of cooled muons, but novel ideas are being explored; “