

UNIVERSITY OF BERN

MIDTERM REVIEW MEETING

JUNE 24, 2022

H2020-MSCA-ITN-2019 effort (GA 858199)

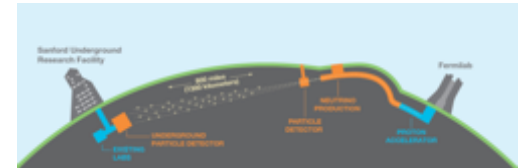
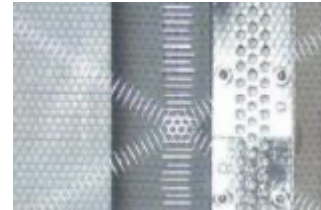
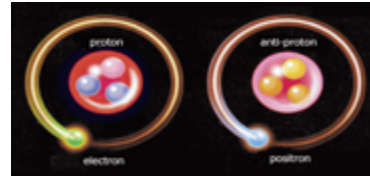
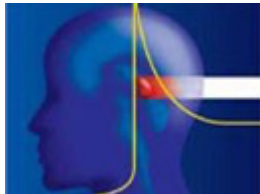
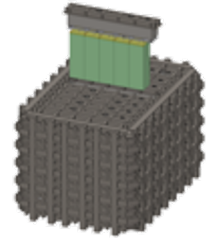
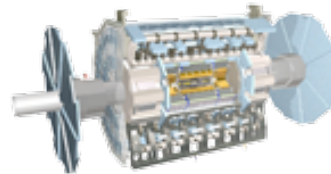


University of Bern

- Founded 1834
- 19k students, 8 faculties, 529 professors
- Laboratory for High Energy Physics
 - ~50 People (Director: Prof. M. Weber)
7 senior/faculty, 10 PostDocs, 20 grad students + tech, admin, undergrads
- Albert Einstein Center for Fundamental Physics since 2010
 - One of 10 competence centers of the University
 - One of the largest (academic) particle physics center in Switzerland

LHEP/AEC University of Bern

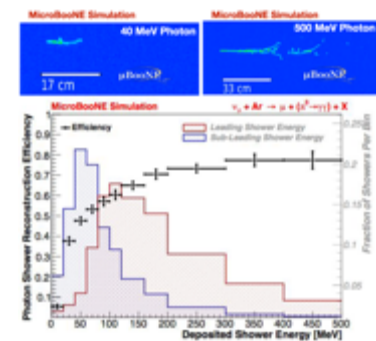
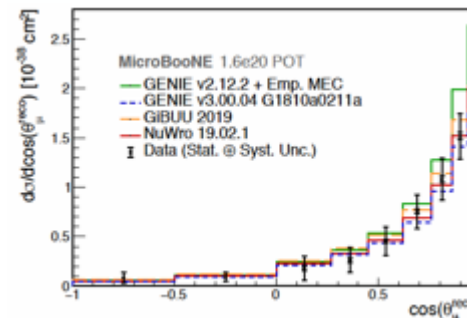
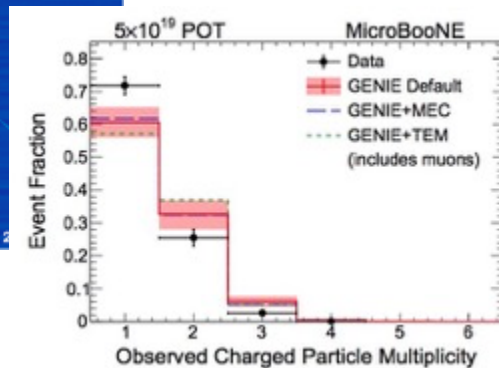
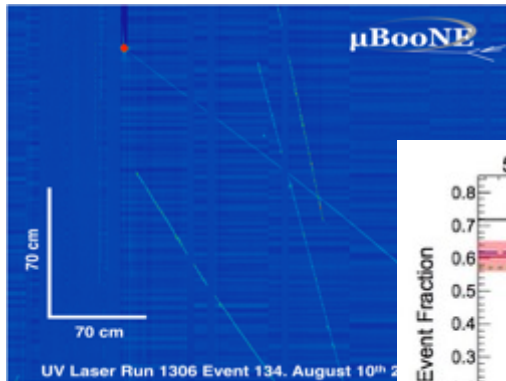
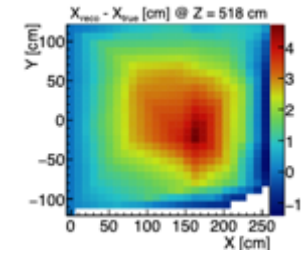
- HE-frontier, Neutrino physics, Detector Development, Applications to Medical, Neutron



- On MCSA INTENSE: short baseline neutrino physics

Short baseline neutrino I

- MicroBooNE
 - Major contribution to the construction
 - Developed and installed a UV-laser calibration system
 - Developed and installed the cosmic ray tagger
 - Lead in the physics analysis management
 - Precise determination of the electric field
 - Analyses in cross section (double differential, $0\Pi0p$)



Short baseline neutrino II

- SBND
 - Cosmic ray tagger
 - Measurement of "rock" neutrinos at SBND
 - UV-laser calibration system

