Abstract Submitted for the APR21 Meeting of The American Physical Society

Muon source from positron on target (LEMMA) MARIO ANTONELLI, MARIA ENRICA BIAGINI, MANUELA BOSCOLO, OSCAR BLANCO-GARCIA, ANDREA CIARMA, ANNA GIRIBONO, SUSANNA GUIDUCCI, CRISTINA VACCAREZZA, INFN-Frascati National Laboratories, ANULLI, MATTEO BAUCE, GIAN MARIO CESARINI, Italy, FABIO FRANCESCO COLLAMATI, ALESSANDRO VARIOLA, INFN-Roma1, Italy, ROBERTO LI VOTI, Roma La Sapienza University, Italy, IRYNA CHAIKOVSKA, ROBERT CHEHAB, IJCLab, Orsay, France, ALBERTO BACCI, ILLYA DREBOT, INFN-Milano, Italy, STEFANO LUIZZO, PANTALEO RAIMONDI, ESRF, Grenoble, France, DONATELLA LUCCHESI, University of Padova and INFN-Padova, Italy, PETER SIEVERS, CERN, Switzerland, LEWIS KELLER, SLAC, USA, NADIA PASTRONE, INFN-Torino, Italy, LEMMA TEAM — Recently alternative schemes to produce muon beams using positrons of about 45 GeV interacting on electrons in target have been studied. The production through the process $e^+e^- \to \mu^+\mu^-$ allows very low emittance beams with no needs of cooling. A short review of the studies for a positron driven muon source, known as the Low EMittance Muon Accelerator (LEMMA) concept, will be presented and preliminary performances of the $\mu^+\mu^-$ source will be described.

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Date submitted: 08 Jan 2021 Electronic form version 1.4