The New Polarized Beam Injection at MAMI, H. EUTENEUER, K. AULENBACHER, D.V. HARRACH, P. HARTMANN*, J. HOFFMANN, K.-H. KAISER, P. JENNEWEIN, H.J. KREIDEL, M. LEBERIG, J. SCHULER, C. ZALTO, Institut Fuer Kernphysik, Universitaet Mainz; C. NACHTIGALL, E. RÉICHERT, M. SCHEMIES, M. STEIGERWALD, Institut Fuer Physik, Universitaet Mainz - A new, very compact set-up for the injection of the polarized beam at MAMI has been realized in the last two years. The new injection does not require the integration of a spin-rotator. Longitudinal polarization at the experiments is achieved by adjusting the accelerator energy, which results in an additional spin rotation of 3.9 degree for a relative change of the MAMI-energy of 10E-4. As a result of the shorter injection we need less beam start-up time and achieve much higher long term stability. The emittance at the injection point has been reduced by 50%.

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