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Large COMPASS polarized solid state target for Drell-Yan physics

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In the COMPASS Drell-Yan programme a negative hadron beam (97% π – , 2.5% K – and 0.5% p) with momentum 190 GeV/c is used. The beam intensity reaches up to 10^8 particles/s. The polarizable solid state NH3 target is placed inside the mixing chamber of a large horizontal helium-3/4 dilution cryostat. A large acceptance superconducting solenoid magnet with nominal field of 2.5 T is used to polarize the protons by microwave pumping around electron spin frequency. Due to the space needed by the hadron absorber the target platform had to be moved 2.3 m upstream from SIDIS position of run 2011. The upgrade of the target system and the initial commissioning are discussed.

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