

subject or title if known	corresponding author	abstract
<p>Conceptual design of the 160 MeV H- Injection into the CERN PSB</p>	<p>W. Weterings</p>	<p>The H- beam from the LINAC4 will be injected into the four superimposed rings of the PS Booster (PSB) at 160MeV by means of an H- charge-exchange injection system. A substantial upgrade of the injection region is required and a completely new H- injection system needs to be built. This paper describes the hardware requirements and constraints, the performance specifications and the design of the H- injection region.</p>
<p>Studies on a wideband, solid-state driven RF system for the CERN PS Booster</p>	<p>M. Paoluzzi</p>	<p>In the framework of the LHC Injectors Upgrade project (LIU) the PS Booster (PSB) RF systems will undergo in depth consolidation and upgrade programs. The aim is increasing the extraction energy to 2 GeV and allowing reliable operations during next 25 years. Substantial improvements could come from the replacement of the existing narrowband, tuned systems covering the h=1 and h=2 frequency ranges (0.6 ÷ 1.8 MHz and 1.2 ÷ 3.6 MHz respectively) with wideband (0.5 ÷ 4 MHz) Finemet® loaded cavities. The new system would be modular, allow multi-harmonic operation, use solid-state power stages and include fast RF feedback to compensate beam loading effects to some extent. A prove of principle system providing ≈3.0 kV accelerating voltage has been designed, constructed and installed in one of the PSB rings. This paper provides details on the design and measurements as well as information on the project status.</p>

PSB dump	A. Sarrio Martinez	
H-/HO dump	C. Maglioni	
CERN PSB to PS Transfer Modifications for the 2 GeV Upgrade	W. Bartmann	<p>Within the frame of the CERN PS Booster (PSB) energy upgrade, the PSB to PS transfer line will be adapted for pulse-to-pulse modulated operation. A modified lattice is presented including a re-design of the switching dipole between ISOLDE and PS and additional collimators to protect the PS injection septum.</p> <p>Optics solutions optimised for small emittance LHC beams as well as for the large emittance high-intensity beams are shown.</p>