Internal H0/H- dump

The conceptual ideas for the dumping of the unstripped H0 and H- ions coming from the PSB injection region at the energy and beam parameters due to the Linac4 future connection is presented in this talk.

The dump core itself covers longitudinally the second half of the BSW4 chicane magnet, close by but out of the trajectory of the circulating H+ beam. Due to dimension constraints and the heat load to the core, the dump has to be actively cooled via the back-flange possibly without any feed-through, which impose the need to guarantee the good holding of the core together with the good thermal contact between the flange and the core itself.

Specifications, parameters, layout and constraint are presented. First results based on studies on activation as well as thermo-mechanical behaviour are also presented and discussed. Finally standing questions and issues are addressed.

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