**Beam Coupling Impedance of the Beam Screen of the LHC Injection Kicker Magnets**

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The LHC injection kicker magnets experienced significant heating of the ferrite yoke due to beam induced heating (due to wakefields caused by the beam interacting with the magnet) during operation of the LHC in 2011 and 2012. The causes of this impedance were studied in depth and an improved beam screen implemented as a result to reduce the impedance. We present here the results of measurements and simulations of the new beam screen design, in addition to predicted power loss for operation after lost shutdown 1 and proposed HL-LHC operational parameters.

**Program topic: Beam Dynamics and Electromagnetic Fields (05) - High Intensity in Circular Machines (D03)**