

Impedance Study for a Slotted-Pipe Kicker,
F. ZHOU, Y. HAO, Institute of High Energy Physics,
Beijing, China - This paper introduces the principle of a
new slotted-pipe kicker for upgrade BEPC, which is
made by using vacuum pipe itself with proper slits as
current conductors. Its impedance and the loss factor
are presented in detail in this paper by using MAFIA
and analytical method. Calculations shows that its
impedance is reduced about 10 times compared with
our present air-coil kicker for BEPC injection. Then we
give its impedance measurement value adopting coaxial
wire method and the result agrees well with the
simulation and analytical value.