

**Comparison of Measured and Predicted Inductance per Cell for a Travelling Wave Kicker Magnet, M.J. BARNES, G.D. WAIT, TRIUMF** - Many present day kicker magnets must have a relatively short field rise time, and low flat-top and post-pulse ripple. In order to design the electrical circuit for a kicker magnet with the required specifications for field quality, it is necessary to quantify the effect of end-fields on the inductance distribution throughout the travelling wave kicker magnet. This paper present the results of an electromagnetic analysis of a relatively short, 10 cell, prototype travelling wave kicker magnet using a three dimensional code capable of modelling eddy-currents. In order to verify the predictions inductance measurements are also presented for the prototype kicker magnet.