Contribution ID: **177** Type: **Poster Presentation**

Electrostatic Potential Map Modelling with COSY Infinity

Tuesday, 12 May 2015 17:00 (0 minutes)

COSY Infinity is a differential-algebra based simulation code which allow accurate calculation of transfer maps to arbitrary order. COSY's existing internal procedures were modified to allow electrostatic elements to be specified using an array of field potential data from the midplane. Additionally, a new procedure was created allowing electrostatic elements and their fringe fields to be specified by an analytic function. This allows greater flexibility in accurately modelling electrostatic elements and their fringe fields. Applied examples of these new procedures are presented including the modelling of a shunted electrostatic multipole designed with OPERA, a parallel plate electrostatic bender, and the effects of different shaped apertures in an electrostatic beam line.

Primary author: Dr MALONEY, James (TRIUMF)

Co-authors: Dr BAARTMAN, Richard (TRIUMF); Dr SAMINATHAN, Suresh (TRIUMF); Dr PLANCHE, Thomas (TRIUMF)

Presenter: Dr MALONEY, James (TRIUMF)

Session Classification: Poster Session B