Contribution ID: **35**   Type: **not specified**

LOCO for LHC

Tuesday 21 June 2011 09:00 (20 minutes)

The LOCO principle is based on measuring orbit corrector responses and fitting numerical models to the measured data. This principle is very well known and successfully applied in many fields. To be prepared for the commissioning of the LHC and its transfer lines, a dedicated software project, Aloha (Another Linear Optics Helper Application), was launched to cover the requirements for the LHC: Aloha is a Java reimplementation of the LOCO principle with many extensions. This software was used extensively during the commissioning of the transfer lines and the LHC injection tests to identify optics errors and to verify corrector- and monitor polarities with circulating beam in the LHC.

In this talk, an overview of the used principles will be given, results of several example use cases during LHC commissioning will be presented and the pros and cons of using the LOCO principle in the LHC will be sketched.

Presenter: FUCHSBERGER, Kajetan

Session Classification: Techniques review - I