## **International Workshop on Accelerator Alignment 2010**



Contribution ID: 3 Type: not specified

## The Initial Geodetic Survey for the SPIRAL2 Process Installation

Monday 13 September 2010 14:50 (20 minutes)

The SPIRAL2 project located at the Grand Accélérateur National d'Ions Lourds (GANIL facility - Caen, France) has been studied since the beginning of 2001, and is now under construction. This project aims at delivering rare (radioactive) isotope beams with intensities not yet available with presently running machines. An important aspect of this project is that it is foreseen to deliver up to five different beams in parallel to the users.

This paper is focused mainly on the initial geodetic survey for the SPIRAL2 process installation. The positioning of the process and by extension of the buildings is subject to an important constraint due to the future connection of the radioactive beam line to the existing accelerator.

In order to reach the performances, a geodetic reference network (surface network) linked to the local survey network of the existing accelerator is designed.

The surface network will be transferred to the floor of the SPIRAL2 accelerator tunnel, in order to define the underground reference network for the process setup. Final goal of the initial geodetic survey is to align process components of accelerator according to design within required tolerance.

**Primary author:** Mr BEUNARD, Rémy (GANIL - CEA/DSM-CNRS/IN2P3)

Co-authors: Mr LEFEVRE, Alexis (GANIL - CEA/DSM-CNRS/IN2P3); Mr LEGRUEL, François (GANIL - CEA/DSM-CNRS/IN2P3)

Presenter: Mr BEUNARD, Rémy (GANIL - CEA/DSM-CNRS/IN2P3)

Session Classification: Day\_1, Session\_1, Survey & alignment of machine components & experi-

ments

Track Classification: Survey & alignment of machine components and experiments