



ACDIV-2018-08

April 2018

## **Upgrade of the Alba Magnetic Laboratory for measuring LIPAc HEBT Quadrupoles and Dipole**

J. Marcos, F. Becheri, J. Campmany, L. Garcia-Orta, V. Massana, R.A. Petrocelli, B. Brañas,  
J. Castellanos

### Abstract

Along 2017 ALBA magnetic measurements facility has measured LIPAc HEBT quadrupoles and dipole designed by CIEMAT and built by ELYTT Company. ALBA magnetic measurements laboratory has been improved through an upgrade program of its measurement benches to complete this set of measurements. One of the main aims of the upgrade has been the replacement of obsolete parts and the standardization of both hardware and software to ensure an easy maintenance of the systems. In parallel, new shafts for the rotating coil bench have been built and tested, with specific designs to improve the sensitivity and minimize the signal-to-noise ratio. In this contribution we detail the upgrades and the results of performance tests.

Accelerator Division  
Alba Synchrotron Light Source  
c/ de la Llum, 2-26  
08290 Cerdanyola del Valles, Spain