

Roberto Noriega-Papaqui Report

In this report I mention the activities that I made during 6 months of Hellen training.

Barcelona (months 4).

At Barcelona I was working at the Estructura i Constituents de la Materia Department, under the direction of Dr. Joan Sola and Dr. Jaume Guasch.

- I learned to use the programs FeynArts, FormCalc and LoopTools.
- I took the Standard Model course.
- Together with my advisors we studied the process $\sigma(e e \rightarrow b \bar{s} + b \bar{s})$ in the Two Higgs Doublet Model type II

CERN (months 2).

At the CERN I worked under the direction of the Dr. Arturo Fernández-Tellez in the ACORDE group.

- With the group we recheck and repair the ACORDE modules of damages.
- With the group we characterized the ACORDE modules.
- With the group we put new phototubes in the ACORDE modules
- With the group we found the plateau of the ACORDE modules with new phototubes.
- I participated in the weekly ACORDE group meeting.