

WITCH: Studies made in 2005

Monday 6 February 2006 16:40 (20 minutes)

During the last year, efforts were made to improve and understand in more detail the WITCH experimental setup. At the end of 2004 several problems were uncovered and a number of them have already been dealt with in detail.

The MCP's used for tuning the ion beam in the setup were shown to have saturation effects but this problem is now understood and can be prevented.

The behavior of the Pulsed Drift Tube is, thanks to simulations, better understood although some effects which limit the present efficiency of the setup still have to be studied in more detail. Extensive simulation work has also been performed on the behavior of the beta-particles in the setup. This has revealed a possible problem of background events which will be further investigated experimentally. Currently a large effort is being put into improving the total efficiency of the setup with the goal of measuring the first recoil ions in the coming year.

Author: Mr COECK, Sam (IKS, KULeuven)

Presenter: Mr COECK, Sam (IKS, KULeuven)

Session Classification: Trapping for Nuclear Physics