

Recovery Time and Double Hit Resolution Measurements of SiPMs Using a Double Pulsed Laser

Thursday 14 June 2012 15:30 (40 minutes)

The Silicon Photomultiplier (SiPM) is an extremely versatile photo detector which can be used in various fields ranging from astrophysics, particle and nuclear physics to medical imaging. One of the important parameters of a photo sensor is the performance in high rate environments. In order to characterize the rate capability and the double hit resolution of SiPMs, we performed an experimental study to determine the cell recovery time for various sensors of different manufacturers.

Author: Mr GRUBER, Lukas (Stefan Meyer Institute for Subatomic Physics, Austrian Academy of Sciences, Vienna, Austria)

Co-authors: Dr SCORDO, Alessandro (INFN, Laboratori Nazionali di Frascati, Frascati (Roma), Italy); Dr ROMERO VIDAL, Antonio (INFN, Laboratori Nazionali di Frascati, Frascati (Roma), Italy); Dr CURCEANU, Catalina (INFN, Laboratori Nazionali di Frascati, Frascati (Roma), Italy); Dr MARTON, Johann (Stefan Meyer Institute for Subatomic Physics, Austrian Academy of Sciences, Vienna, Austria); Dr SUZUKI, Ken (Stefan Meyer Institute for Subatomic Physics, Austrian Academy of Sciences, Vienna, Austria); Dr VAZQUEZ DOCE, Oton (INFN, Laboratori Nazionali di Frascati, Frascati (Roma), Italy); Mr BRUNNER, Stefan (Stefan Meyer Institute for Subatomic Physics, Austrian Academy of Sciences, Vienna, Austria)

Presenter: Mr GRUBER, Lukas (Stefan Meyer Institute for Subatomic Physics, Austrian Academy of Sciences, Vienna, Austria)

Session Classification: Posters B