



UNIVERSITA' DEGLI STUDI DI PAVIA

DOTTORATO DI RICERCA IN FISICA

COLLOQUIA 2016-2017

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Aula 102 "L. Giulotto", ore 16.00

Dipartimento di Fisica, via Bassi 6, Pavia

True measurements, false discoveries: a walk through High Energy Physics achievements

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Abstract: Research at particle accelerators has been since its inception 'Frontier research': with ever increasing energy and improved detector and accelerator technology in the last 70 years we have explored the ultimate components of nature and the fundamental interactions regulating its functions. In this process it is important to maintain a level of control over all the elements which could mislead the interpretation of the experimental data. In this seminar we will try to go 'behind the scene' to understand the processes developed in time to keep under control the systematics of the measurements in order to get reliable results and will try to show through examples how lack of rigor can lead to wrong interpretations or premature conclusions.

