



UNIVERSITA' DEGLI STUDI DI PAVIA

DOTTORATO DI RICERCA IN FISICA

COLLOQUIA 2016-2017

Giovedì 26 Gennaio 2017

Aula 102 "L. Giulotto", ore 16.00

Dipartimento di Fisica, via Bassi 6, Pavia

Fiber-top technology: from fundamental physics to pre-clinical research

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Abstract: At times, a stroke of luck allows us to create a connection between our most fundamental research efforts and an open problem that part of our society is interested to solve. In this colloquium, I will talk about my experience with this process. I will introduce our research program on the Casimir effect to show how the study of this fundamental phenomenon led me to invent the so-called "fiber-top cantilever". I will then elaborate on how my group is currently using fiber-top devices to better understand the role of mechanics in cells and tissues. Finally, I will go back to fundamental research to discuss applications of our new engineering skills to Casimir physics, dark energy experiments, and the social sciences.

