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## CAEN: Tools for Discovery

*Friday, 5 October 2018 11:30 (20 minutes)*

CAEN S.p.A. is an important industrial spin-off of the INFN (National Institute for Nuclear Physics), since 1979. CAEN is pleased to present company and its activities in educational field. CAEN brings the experience acquired in almost 40 years of collaboration with the High Energy & Nuclear Physics community into the University educational laboratories by providing modern physics experiments based on the latest technologies and instrumentation.

CAEN realized different modular Educational Kits, developed together with the University of Insubria (IT) and University of Aveiro (PT). The set-ups are all based on Silicon Photomultipliers (SiPM) state-of-the-art sensor of light with single photon sensitivity and unprecedented photon number capabilities. The Educational Kits, provided with a dedicated Control Software, are modern and flexible platforms for teaching the fundamentals of Statistics, Particles Detection and Nuclear Imaging.

Moreover, CAEN developed a series of experiments with different difficulty level, from basic experiments to more complex applications. The idea is to target the experiment depending on the student educational level. With this approach, the experiments proposed can be performed at high school level (grade 11, 12) science classes up to undergraduate physics laboratory and PhD courses. The main goal is to inspire students and guide them towards the analysis and comprehension of different physics phenomena with a series of experiments based on state-of-the art technologies, instruments and methods.

**Apply to be considered for a student award (Yes / No)?**

No

**Level for award (Hons, MSc, PhD, N/A)?**

No Level

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