

Simone Giroletti

Electronic Instrumentation Laboratory
Ph.D. Student in Microelectronics

SHORT BIOGRAPHY

Simone Giroletti obtained the Bachelor's degree, *summa cum laude*, at the University of Pavia. From the same university, he received the Master's degree in Electronic Engineering (curriculum Microelectronics), *summa cum laude*, with the thesis "Analysis and design of a parallel counter in a 110 nm CMOS technology".

During his master studies, he joined a curricular internship program, first in the PCB Lithography Laboratory and then in the Electronic Instrumentation Laboratory, which introduced him to the realization of PCBs, the design of digital integrated circuits, and the field of CMOS sensors for charged particles.

Currently, he is a first-year student for the Ph.D. program in Microelectronics (XXXVII cycle) and works in the Electronic Instrumentation Laboratory of the University of Pavia. He is also an academic tutor for the bachelor courses of Elettronica 1 and Circuiti elettrici lineari.

RESEARCH ACTIVITY

In November 2021, Simone Giroletti became a fellow with the Italian National Institute for Nuclear Physics (INFN), section of Pavia. His research activity concerns the design of high time resolution read-out electronics for avalanche detectors in the framework of the ASAP project (Array of Silicon Avalanche Pixels). He was also involved in the design of a chip with SPAD arrays, monolithically integrated with read-out electronics, for which he designed a parallel counter as the basis for prototype dSiPMs (digital Silicon Photomultipliers) integrated within the chip.