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## **PROBIST Postdoctoral Fellowship\* (IFAE-Barcelona)**

PROBIST is a post-doctoral fellowship programme led by the Barcelona Institute of Science and Technology, BIST (<http://bist.eu/>). Altogether, 61 fellowships will be awarded and implemented in top research in the Barcelona and Tarragona area (Spain). Within this programme, the Institute for High Energy Physics in Barcelona (IFAE), one of the BIST partners, offers a three years postdoctoral position on silicon detector developments, in the framework of the ATLAS experiment and the VIRGO interferometer.

Silicon detectors are an increasingly important class of radiation and particle detection devices, with a broad spectrum of applications, from high-energy physics to nuclear medicine. IFAE is working on silicon cutting-edge technologies for both the upgrade of the ATLAS experiment at the LHC and the upgrade of the VIRGO interferometer for gravitational waves detection. Ultra-radiation-hard pixelated 3D sensor modules fabricated at CNM-IFAE are already being used in the IBL and AFP ATLAS subsystems. In preparation for the HL-LHC period, IFAE is now leading the development of the next generation of 3D sensors and the low gain avalanche detectors for timing applications, and is developing a more cost effective approach based on depleted monolithic CMOS devices.

IFAE is also exploring new and silicon-based photo sensors for monitoring and suppressing the infrared stray light scattered close to VIRGO's mirrors and affecting the sensitivity of the interferometer. These developments are also linked to possible applications beyond fundamental physics. The successful candidate will be expected to participate in one or more of the above-mentioned projects and will be encouraged to pursue her/his own research interests.

Description of the position and the online application instructions, including information on the eligibility criteria, are available at:

<http://bist.eu/probist/>

Position code: IFAE\_C3\_01  
Deadline 26 November 2018

For inquires about ATLAS and VIRGO activities at IFAE:  
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IFAE is an equal opportunity employer committed to diversity in the workplace, and we welcome applications from all qualified candidates.

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