

ERC Consolidator Grant

Prof. Antonio Acin is granted the ERC Consolidator Grant for young research leaders

January 15, 2014

ICREA Professor at ICFO, Antonio Acin, has just been granted the European Research Council (ERC) Consolidator Grant (CoG) to carry out the project entitled "QITBOX" (Quantum Information Theory with black BOXes). The goal of the project is centered on developing a novel device-independent framework for quantum information processing to understand what can and cannot be done for information processing using only the observed correlations among the devices. In this context, the research intends to characterize existing correlations among quantum devices, understand and search for information protocols that can benefit substantially from these correlations and apply these results to concrete physical setups, such as the quantum-optical realizations of the protocols or the study of the non-local properties of many-body systems.

This is not the first time Prof. Acin has been awarded an ERC Grant for his outstanding research. In 2008, he was awarded his first ERC Starting Grant for his project entitled PERCENT (Percolating Entanglement and Quantum Information Resources through Quantum Networks). Additionally, in 2012 he received an ERC- Proof of Concept grant to support work on a project with market potential, called MAMBO, on quantum random-number generation, in collaboration with ICREA Professors at ICFO Morgan Mitchell and Valerio Pruneri.

As a continuation of the ERC Starting Grants (StG), which boost the independent careers of young excellent researchers who are starting to consolidate their own independent research team or program, the Consolidator Grant (CoG) aims to enhance opportunities for young European researchers and support them in their transition from working under a supervised leadership to being well recognized research leaders in their fields of study.

Congratulations Toni for this outstanding award!