

1. Main research topics

Title	Software Development on Fusion Control and Data Acquisition ATCA Instrumentation Systems.
Short description (max. 200 words)	Study and implementation of Software Solution Tools based on the EPICS platform (Enhanced Industrial and Physics Control System).
Specific targets	<ol style="list-style-type: none">1. Prototype of a Control and Data Acquisition system based on the ATCA platform for the ITER tokamak, including the development of EPICS IOCs and HMI with CSS, CA, Beauty and Beast, as well as software interfaces for IPMI/ShMC Hardware Management;2. Instrumentation ATCA for the Project "European SPALATION source in Bilbao" (Bilbao-ESS), a collaboration to develop a data acquisition system dedicated to monitoring of secondary emission, with the aim of developing real-time tomography;3. Instrumentation ATCA for the Wendelstein 7-X tokamak;4. Participate in the Collaboration Agreement between the Company National Instruments and the IPFN Institute for the ATCA instrumentation software development;5. Write documentation.
Milestones	TBD
Timeline	Throughout 2012.

2. Expected output

Write at least one scientific paper to be published on an international journal.