6. 2005 – 2009: FACETS: Fast Analog Computing with Emergent Transient States in Neural Architectures.

Contributions

Description of any significant infrastructure, relevant to the proposed work CPU and CPU clusters for computing are available at the Institute.

7, SPANISH INSTITUTE OF OCEANOGRAPHY (IEO)

The Spanish Institute of Oceanography (IEO), founded in 1914, is a public research organization dedicated to research in marine science, especially in relation to scientific knowledge of the oceans, sustainability of fishing resources and the marine environment. Attached to the Spanish Ministry of Science and Innovation, the IEO is an autonomous body, with its own personality and legal assets, with a workforce of approximately 700 people, of which 80% are research and research support personnel. The IEO budget exceeds 65 million Euros and has a wide geographical coverage and important facilities. It has a central office in Madrid, nine coastal oceanographic centers and five marine culture experimentation plants. Its oceanographic fleet, with more than twenty vessels, has five important oceanographic vessels. The IEO not only conducts basic and applied research, but also provides scientific and technological advice to administrations in matters related to oceanography and marine sciences, being the research and advisory body for the fisheries sector policy of the Spanish Government. Furthermore, it is the scientific and technological representative of Spain in most of the forums and international organizations related to the sea and its resources.

Contribution to ROBHOOT

IEO is the coordinator of Dissemination, Knowledge transfer and Outreach (WP4). IEO contributes to the dissemination and exploitation plan, the communication for the sustainability of the Oceans case study and the publications and conferences outreach. Dr. Francisco Baldó (male) will be the lead of WP4 in ROBHOOT. He works for the Spanish Institute of Oceanography in Cadiz as a Senior Researcher. His main scientific motivation is to understand the biodiversity of marine ecosystems and contribute to the sustainable management of fisheries resources. During many years, he has been involved in long-term ecological research in the Guadalquivir estuary, which has set up a time series of monthly sampling of the aquatic communities of the estuary. The basis for his PhD was theoretical individual-based models based on a high resolution individual-based food web data-set of the Guadalquivir estuary. Since 2008 he is the cruise leader of the Porcupine bottom trawl survey, which takes place every September at the Porcupine bank (West of Ireland) and a member of the ICES International Bottom Trawl Surveys Working Group (IBTSWG), which coordinates the European bottom trawling surveys in the North Sea and the North East Atlantic. Overall, he has extensive experience in field work including over 50 oceanographic cruises. The combination of the empirical and theoretical facets is, perhaps, the most outstanding characteristic of his background.

Gender balance

Gender balance is currently a priority for Spanish society and, therefore, for IEO. The Women and Science Unit of the Spanish Ministry of Science and Innovation is in charge of promoting the proper application of the principle of gender mainstreaming in the scientific, technological and innovation fields. At the IEO there is also a Gender Equality Plan and Commission to ensure the effective promotion of equality between men and women. In addition, since 2015 IEO has carried out the project "Women and oceanography" (https://oceanicas.ieo.es/) which aims to disseminate the work of scientists dedicated to the study of oceans, both current and past, to publicize their life and work, thus, trying to generate scientific vocations in girls and boys. Currently, approximately half of the researchers of the IEO are women, but they only represent a third of the directive staff.