
PRESS RELEASE

FOR IMMEDIATE RELEASE

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China-Backed Project Focuses On The Energy-Efficient 'Green Network'

Institute IMDEA Networks is to participate in a new project aiming to develop theories and techniques for globally reducing energy consumption in wireline networks.



As the Internet Society continues to evolve, communication and computer networks are growing in importance, creating new energy demands—as well as a growing impact on the environment. There is an urgent need for smarter energy-management systems, and for solutions that reduce energy consumption without affecting service quality. Now, Institute IMDEA Networks has announced a new project focused on the "Green Network", devoted to developing theories and techniques for globally reducing energy consumption in wireline networks. This project ties into IMDEA

Networks' existing focus on Energy-Efficient Networking, which, along with Wireless Networking and Network Protocols and Algorithms, is one of the organization's three general areas of concentration. Work began on the Green Network project in January 2011, and it is scheduled to conclude in December 2014.

The research will focus on the development of more energy-efficient techniques for the design of networking infrastructure and the deployment of network nodes, as well as the creation of scheduling and routing algorithms and protocols that can reduce network energy consumption. Researchers will provide correctness proofs and

theoretical analyses of the protocols and algorithms. Additionally, they will build a platform for simulating them, and for testing the infrastructure design and node deployment schemes. The project will also formalize system models that can realistically express the characteristics and restrictions of current network technologies.

The Chinese government is playing a significant role in the project –funding is provided by the National Natural Science Foundation of China, and the research is to be led by Prof. Zhiyong Liu of the Institute for Computing Technology (ICT) at the Chinese Academy of Sciences. The research thus opens the way for further collaboration between Institute IMDEA Networks and the Chinese government, including government-backed institutions such as Chinese Academy of Sciences, and Tsinghua University, the most important Chinese university in this field. This creates new opportunities for innovation and economic growth, something particularly crucial in the current economic climate. IMDEA Networks' role on the project has been facilitated by Dr. Antonio Fernández Anta, who is co-Principal Investigator of the project. Dr. Fernández Anta has been a Senior Researcher at the Institute since the fall of 2010, on leave from a Full Professor position at the Universidad Rey Juan Carlos in Madrid, one of the project partners. The other three partners are the Institute of Computing Technology (Chinese Academy of Sciences), Tsinghua University, and Alcatel-Lucent.

Press release



Dr. Antonio Fernández Anta, Senior Researcher, Institute IMDEA Networks.



Institute of Computing Technology



中国科学院
CHINESE ACADEMY OF SCIENCES
Chinese Academy of Sciences

The Institute for Computing Technology (ICT) at the Chinese Academy of Sciences is playing a leading role in the Green Network project.

ABOUT INSTITUTE IMDEA NETWORKS

Institute IMDEA Networks is an international research institute supported by the Regional Government of Madrid and the European Union. The Institute brings together distinguished and young scientific researchers from all over the world to develop cutting-edge science and technology in the field of networking. In order to ensure a truly international perspective, the Institute's working language is English. Promoting interdisciplinary collaboration, the Madrid-based Institute works in partnership with leading businesses and scientists from around the globe. By generating new knowledge and understanding through its activities, the Institute supports the continued development of Madrid and Spain as a centre for international scientific and technological research.

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