The Abdus Salam
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International Atomic Energy Agency

Workshop on
New Frontiers in Internet of Things

7 - 18 March 2016 ICTP - Miramare, Trieste, Italy

The Telecommunications/ICT4D Laboratory **(T/ICT4D**) of the Abdus Salam International Centre for Theoretical Physics (ICTP, Trieste, Italy), in collaboration with the **University of Cambridge**, the **University College London**, and the **United Nations Economic Commission for Africa (UNECA**), are organizing a "**Workshop on New Frontiers in Internet of Things**", to be held at the ICTP, Trieste, Italy, from **7 to 18 March 2016**. This Workshop is co-sponsored by the International Telecommunications Union, Telecommunication Development Sector **(ITU-D)**, the Internet Society **(ISOC)** and the United Nations Economic Commission for Africa **(UNECA)**.
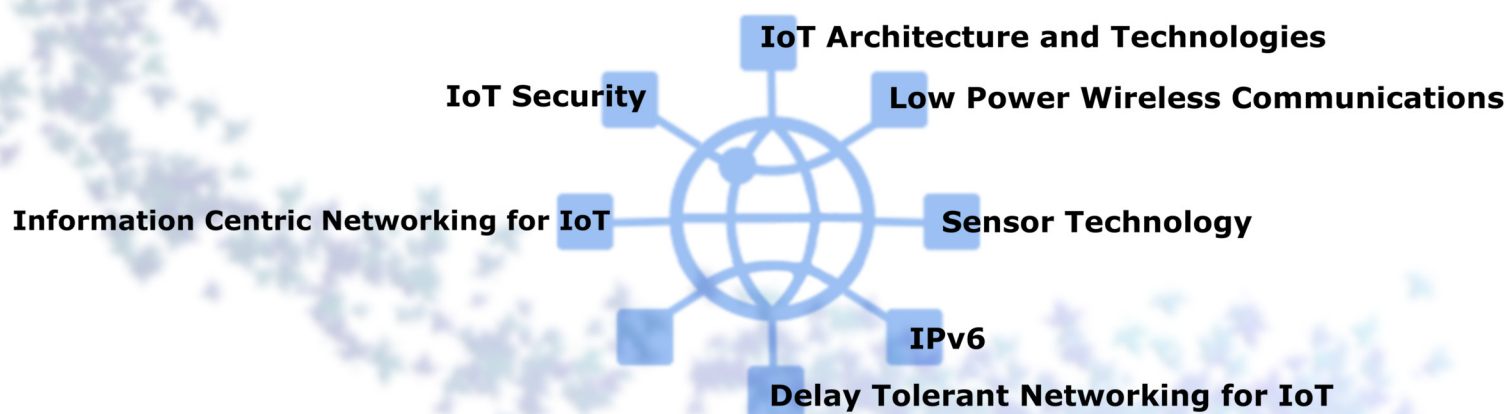
Brief Description:
The Internet of Things (IoT) refers to the networked interconnection of objects in addition to traditional networked devices. This new technology has the potential to change the world, just as the Internet did. This is starting to happen, as the continual decrease in size, cost, and energy consumption of wireless devices is increasing the number of mobile objects dramatically. The number of mobile objects composing the IoT will be huge: in 2020 between 12 and 50 billion devices are expected to be connected, a 12 to 50-fold increase from 2012. This implies that the traffic generated will explode. The huge amount of traffic will require standardized interfaces and a huge number of addresses, only possible by the utilization of IPv6.

Applications of Internet of Things can greatly benefit people in Developing Countries: food safety can be checked, water quality can be monitored, air quality can be measured, landslides can be detected at an early stage and mosquitoes can be counted in cities in real time.

In this Workshop we will look at applications of IoT, with a focus on low-cost, open and sustainable solutions. We will look at the social impact of IoT and how privacy and security issues can be tackled. We will discuss the best solutions in terms of connectivity and energy efficiency.

Topics will include:

IoT Security

IoT Architecture and Technologies

Low Power Wireless Communications

Information Centric Networking for IoT

Sensor Technology

IPv6

Delay Tolerant Networking for IoT

ITU

United Nations
Economic Commission
for Africa

Internet
Society

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* Also Local Organizer

PARTICIPATION
Scientists and students from all countries that are members of the United Nations, UNESCO or IAEA may attend the Workshop. As it will be conducted in English, participants must have an adequate working knowledge of this language. Although the main purpose of the Centre is to help researchers from developing countries, through a programme of training activities within a framework of international cooperation, a limited number of students and post-doctoral scientists from developed countries are also welcome to attend.
As a rule, travel and subsistence expenses of the participants are borne by their home institutions. Every effort should be made by candidates to secure support for their fare (or at least half-fare). However, limited funds are available for some participants, who are nationals of, and working in, a developing country, and who are not more than 45 years old. Such support is available only for those who attend the entire activity. There is no registration fee.

HOW TO APPLY FOR PARTICIPATION:
An Online Application Form can be accessed through the Workshop website
http://indico.ictp.it/event/7601/

The website has comprehensive, step-by-step instructions to guide you on how to fill out and submit the Application Form. Deadline: **18 DECEMBER 2015**

Activity Secretariat: E-mail: **smr2819@ictp.it** Telefax: +39-040-224163
ICTP Home Page: **http://www.ictp.it**

DEADLINE to apply:
18 December 2015

(Trieste, October 2015)