



The Abdus Salam
**International Centre
 for Theoretical Physics**
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Regional Workshop on the use of Wireless Sensor Networks and UAVs for Radiation Monitoring

25 - 29 January 2016

**(Argentine National Atomic Energy Commission (CNEA) Bariloche Atomic
 Centre, Argentina)**

The Abdus Salam International Centre for Theoretical Physics (ICTP) Telecommunications/ICT4D Laboratory (T/ICT4D), in collaboration with the The International Atomic Energy Agency (IAEA) Nuclear Science & Instrumentation Laboratory and Argentine National Atomic Energy Commission (CNEA) Bariloche Atomic Centre, Argentina, will jointly organize a Regional Workshop on the use of Wireless Sensor Networks and UAVs for Radiation Monitoring, to be held in San Carlos de Bariloche, Argentina, from 25 to 29 January 2016.

Wireless technology has resulted in a data collection revolution in recent years. The continuing improvements in consumer electronics, photovoltaics and batteries have enabled the construction of low-cost custom built detectors and data acquisition / wireless control systems. The ability of such systems to gather data in remote locations e.g. no grid power, over long periods of time and through volume large area coverage facilitates the possibility of developing (near) real-time broad area maps.

The deployment of sensors on a rapid basis and to precise locations in 3D has been made possible even for the lowest cost systems by taking advantage of UAVs or RPAS. The ability to perform remote measurements makes the platform ideal for many radiation monitoring measurements and at a fraction of the cost of manned aircraft.

The workshop will consist of presentations, demonstrations and hands-on sessions to learn how to monitor radiations with wireless sensor networks and UAVs. The participants are expected to have undertaken some introductory tutorials to ensure they have a basic knowledge prior to the workshop.

Participation

Scientists and makers from Latin American and Caribbean countries that are members of the United Nations, UNESCO or IAEA may apply for participation. As the Workshop will be conducted in English, participants should 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 the region is also welcome to attend.

As a rule, travel and subsistence expenses of the participants should be borne by the home institution. 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 to be selected by the Organizers, 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

The Online Application can be accessed at the activity website: <http://indico.ictp.it/event/7573/> Once in the website, comprehensive instructions will guide you step-by-step on how to fill out and submit the application form.

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APPLICATION DEADLINE

9 November 2015

