



European Coordinated Research on Long-term Challenges in ICST

Call 2015 Topics

The CHIST-ERA ERA-NET is a consortium of 18 research funding organisations with programmes supporting ICST. The consortium is itself supported by the European Union's Future & Emerging Technologies scheme (FET). CHIST-ERA promotes multidisciplinary and transnational ICT research with the potential to lead to significant breakthroughs. The funding organisations jointly support research projects selected in the framework of CHIST-ERA.

In the Call 2015 (to be published in October), two new and emerging topics are addressed

Security and Privacy in Internet of Things

The current IoT vision is grounded in the belief that the steady advances in microelectronics, communications and information technology witnessed in recent years will continue into the foreseeable future. However, technical flaws and threats of intrusions might significantly lower the benefits of the new developments. Traditional protection techniques are insufficient to guarantee users' security and privacy within the future unlimited interconnection. There is a widely acknowledged need to guarantee both technically and regulatory the neutrality of the future internet. Moreover, all aspects of security and privacy of the user data must be under the control of their original owner by means of as simple and efficient technical solutions as possible.

Keywords:

- Internet of things
- Smart objects
- Mobile and ubiquitous computing
- Big data
- User privacy
- Security
- Information protection
- Trustworthiness





chist-era



Terahertz Band for New-Generation Mobile Communication Systems

Within a decade a 1000-fold increase in wireless communication traffic volume is expected, requiring increased throughput and data rates. Although usage of already allocated spectrum frequencies should be further optimised, the Terahertz (THz) band, which remains largely unexplored and is yet unallocated for frequencies over 275 GHz, offers new possibilities. The development of cutting edge low-cost THz devices has recently started, and new network concepts have the potential to cover the connectivity requirements of 5G systems. However, further research on Terahertz band transceivers, antennas, channel models and networking techniques is needed towards the realization of efficient and practical THz Band communication networks.

Keywords:

- Future wireless communications
- Terahertz communications
- Terahertz waves

CHIST-ERA Conference 2015

Save the Date: June 16-18, Lisbon (Portugal)

The topic keywords are given as illustration only. The *CHIST-ERA Conference 2015* in Lisbon (Portugal), June 16-18, brings together prominent scientists and representatives of CHIST-ERA in order to identify and formulate promising scientific and technological challenges at the frontier of research with a view to refine the call text.

Participate in the definition of the Call 2015

In addition to introductory keynote talks by internationally renowned scientists the conference will propose facilitated break-out sessions to brainstorm on the call content. This event represents a unique opportunity for the scientific community to directly participate in scoping the call topics content and defining the call text.

Info and registration:

<http://conference2015.chist-era.eu>

Call Information

Dr. Edouard Geoffrois
Coordinator of CHIST-ERA
French National Research Agency (ANR)
Tel: +33 1 7354 8149
edouard.geoffrois@agencerecherche.fr

Mathieu Girerd
Chargé de mission CHIST-ERA
French National Research Agency (ANR)
Tel: +33 1 7354 8213
mathieu.girerd@agencerecherche.fr



FUNDING OPPORTUNITIES from the
FUTURE & EMERGING TECHNOLOGIES scheme

