# Call for Papers for
# Workshop on Massive Uncoordinated Access Protocols (MASSAP)

**Workshop Co-Chairs**

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http://icc2016.ieee-icc.org/cfw

## Scope

Uncoordinated multiple access protocols represent a key element of wireless communication networks where large populations of users wish to exchange data over a shared medium, playing a critical role for systems that feature sporadic and unpredictable traffic and/or support delay-critical applications, such as real-time machine-type communications. While traditional access schemes regard collisions as a resources loss, in recent years several innovative developments have been proposed, such as physical layer network coding and techniques based on successive interference cancellation, where interference is embraced and utilized creatively. These developments opened a completely new perspective for uncoordinated protocols, paving the way to dramatic performance improvements, and rendering the throughput of random access channels competitive with that of typical coordinated protocols. Furthermore, these new approaches created a novel conceptual link to error control codes and brain-inspired massive networks, thereby opening fundamentally new problems for rather separated research communities. Finally, low-complexity and spectrally efficient schemes may completely change the way scheduled and random access are supported in future standards. The workshop goal is to stimulate innovative contributions to the topic, with emphasis on fundamental limits, cross-layer interactions between MAC PHY layers, and connections to modern coding theory.
**Keynote speaker:** Prof. Krishna Narayanan, Texas A&M University.

## Topics of Interest

- Fundamental limits on uncoordinated random access protocols
- Fundamental limits on random access with successive interference cancellation
- Network coding and physical-layer network coding in multiple access schemes
- Signal processing for successive interference cancellation
- Joint multiuser detection
- Wireless access protocols for:
  - Massive M2M communications
  - Massive Internet-of-Everything
  - Ultra-dense wireless networks
  - Vehicular and satellite networks
  - Large-scale wireless sensor networks
- Innovative techniques for 5G radio access networks
- Random access with spatial diversity
- Random access protocols for real-time applications
- Information flow in brain-inspired massive networks

## Technical Program Committee

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**Important Dates**
Paper submission deadline: December 4, 2015
Acceptance notification: February 21, 2016
Camera-ready paper: March 13, 2016