Wireless and mobile computing advanced significantly in the last decade. In particular, we now face the possibility to spontaneously establish wireless self- organizing networks, such as ad hoc, disruption-tolerant, sensor, and wireless mesh networks. These spontaneous self-organizing networks have been the focus of intensive research activity in recent years. Spontaneous networks arise from the cooperation of mobile devices in an ad hoc fashion requiring no previous infrastructure in place. A key point to couple research and real-life applications in this context is to understand how mobility (of devices, users, and applications) impacts practical networking aspects.

The knowledge accumulated so far in the area of wireless self-organizing networks is in general supported by either simulation or theoretical analysis relying on strong assumptions. The research community needs a step forward and should definitely consider real aspects of mobility in their protocols and algorithms. Such a situation is to be compared with the one found for infrastructure-based networks (e.g., cellular networks), in which mobility has been thoroughly investigated (both theoretically and through measurements) and properly incorporated in their management architecture. In wireless self-organizing networks, contrary to common belief, much is still to be done in this domain, and definitive solutions are still to emerge.

Mobility can no longer be seen as an issue to be hidden from higher layers of the protocol stack, but as an expected characteristic of today's communication systems. In this context, it is of utmost importance to address issues related to the impact of mobility as seen in practice, covering characterization, modeling, and applications of mobility in modern wireless networks. The research community working on wireless self-organizing networks has recently started giving more attention to the practical mobility issues in this area. This may be attested by the increasing number of initiatives worldwide like the many measurement campaigns and the considerable body of developed theoretical background work supported by practical arguments (e.g., mobility models, mobility increasing network capacity, relationship between node mobility and wireless channel conditions).

The goal of this special issue is to help filling this gap by presenting contributions ranging from the impact of mobility on self-organizing networks to mobility-aware architectures for self-organizing networks. As we intend to focus on the practical impacts of mobility in wireless self-organizing networks, papers presenting insights from the applicability of mobility measurements and realistic mobility models in this context are also expected. We will be particularly interested in contributions that explore mobility to improve the behavior of network protocols and algorithms.

We are soliciting papers covering, but not limited to, the following topics:
* Mobility-aware architectures for self-organizing networks.
* Impact of mobility on self-organizing networks.
* Practical applicability of wireless testbeds and mobility measurements.
* Realistic mobility models for self-organizing networks.
* Mobility-centric killer applications.

MANUSCRIPT SUBMISSION
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