

Transceivers for Future 5G Communication Systems and Beyond- Why do we Need to go Further?

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24/09/2019 / 12 — 1 pm| Lecture Hall 144 Light lunch will be served

New challenges appear together with the new industrial requirements posed in front of 5G upcoming standard of wireless communications. The scientific community is actively seeking for the new ways to overcome the limitations of previous standards either by modifying the existing technologies or by introducing new approaches. The requirements involve offering adaptive rates on request, supporting a higher number of subscribers with diverse conditions of QoS, hence a fragmented experience of users within heterogeneous networks. Furthermore, because of the non-negligible energy consumption at the BSs and the devices, the orientation towards green solutions has become compulsory. Another particularity of 5 G is its emphasis on ensuring multimedia services in very particular channels, such as the ones with very high mobility such as TGVs. This presentation will provide an idea on the challenges faced by 5G, and will stress particularly the group research in solutions involving cooperative diversity and massive MIMO.



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Khalida Ghanem (SM) joined the "Centre de développement des Technologies avancées" (CDTA), a leading research center in Algeria in 2011, and a Research Director in 2016. Her research activities focus on mobile radio and current and future communication systems.

Hosted by the Electrical & Computer Engineering Program

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