

IEEE International Conference on Communications 21-25 May 2017 // Paris // France

Workshop on 5G Ultra Dense Networks
Workshop on 5G Ultra Dense Networks

Description of workshop

Driven by the development of mobile Internet and smart phones, data traffic grows exponentially in the current mobile communication systems. Initial estimations indicate that, different from the evolutionary path of previous cellular generations that was based on spectral efficiency improvements, the most substantial amount of future system performance gains will be obtained by means of network infrastructure densification. The opportunities and challenges of fifth-generation (5G) rapidly gain great attention from academics, industries, and governments. Ultra dense network (UDN) is a promising technique to meet the requirements of explosive data traffic in 5G mobile communications. Moreover, when overlaid on top of the macrocells, low power small cells (such as femtocell and picocell) can improve the coverage and capacity of cellular networks by exploiting spatial reuse of the spectrum. Dense small cells can also offload the wireless data traffic of user equipments (UEs) from macrocells, especially for an indoor environment where more than 80% of the data traffic occurs.

© 2018 IEEE Communications

© Copyright 2016 IEEE – All rights reserved. Use of this website signifies your agreement to the [IEEE Terms & Conditions](#). A not-for-profit organization, IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity.