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## D2D Communications in 6G Heterogeneous Ultra Dense Networks

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submissions:

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### Message from the Guest Editor

While a wireless transmission distance will become much shorter in case of ultra dense networks, D2D communication is envisioned to continuously evolve into the 6G wireless communication networks. Such an evolution is able to efficiently support a much larger and more diverse set of devices and applications. Heterogeneous ultra dense networks (HUDNs) integrated with D2D communications is considered as one of the main elements of the future 6G networks. D2D communications in HUDNs can improve users' quality of experience while reducing both power consumption and latency and increasing the network throughput, enhancing proximity services. HUDNs can also give access through the unlicensed spectrum and thereby increase the overall spectral efficiency. Moreover, D2D communication can enable various different vertical applications such as vehicular and public safety communications.

- device-to-device
- heterogeneous ultra dense networks
- vertical applications



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