

## **Abstract**

In this talk, I will present some designs for omnidirectional transmission for massive MIMO systems. In these designs, the transmission power at every transmit antenna is the same for all transmit antennas at every instant time, the receive power at every direction at every instant time is constant as well. In the meantime, full spatial diversity can be achieved when a lower dimensional space-time coding is used at the transmitter. In these designs, perfect sequences, i.e., with ideal auto-correlations, and complementary sequences are adopted and generated, which may carry information.