

## **Baseband Design and Implementation for 5G and Beyond**

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This talk focuses on Advanced Baseband Processing Circuits and Systems for 5G and Beyond: an emerging research field enabling 5G and Beyond from theory to practice. By committing itself to the emerging techniques of baseband processing circuits and systems, this talk means to bring a synthesized source and wide view of recent progress and existing challenges in this particular but very important research area, including: 1) algorithm and code construction for baseband processing; 2) algorithm and implementation co-design; 3) architecture and implementation optimization for baseband; and 4) artificial intelligence (AI) for 5G and Beyond baseband. The tutorial will identify technical challenges and recent results related to 5G and Beyond applications such as Internet of Things, autonomous vehicles, robotics and UAVs, and smart buildings and cities.