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## An Adaptive Scheduling Based Communication in 5G Network

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### Abstract--

In recent days, communication networks are rapidly evolving, to meet the growing demands of the mobile user with advanced wireless technologies like 5G, SDN and HetNets. In the wireless era, the mobile end users expect seamless services and interference-free communication over broadband wireless networks. In 2020, 5G wireless technology is meant to be commercialized for the outside world. Currently, Wireless interoperability for Microwave Access (WiMAX), Long Term Evolution (LTE), Long Term Evolution-Advanced (LTE-A) are the prominent technologies in networks, which are moving towards 5G HetNets. The network vendors are adding more features towards building the smart cities where Quality of Service (QoS) has to be maintained. In the dense network, more users are simultaneously approaching services with the lack of QoS. To meet the user requirements, more mobile station deployment is required. When users transmit the data simultaneously with a continuous flow of information, network interference occurs. For reducing this network interference, a modification in network deployment strategy is required.

**Key Words:** LTE , QoS, Massive MIMO ,Scheduling , adaptive algorithm.

## I. INTRODUCTION

Today the wireless communication has attracted around two third of world population due to its linear development both in technology as well as increase in user demand. Wireless communication a fast growing technology not only attracted the consumer but also the developing business man, research students and enthusiastic engineers all around the globe. The advances in mobile telephony can be traced in successive generations from the early "0G" services like Mobile Telephone Service (MTS), to first generation "1G" analog cellular network, second generation "2G" digital cellular networks, third generation "3G" broadband data services to the current state of the art, fourth generation "4G" native-IP networks. Fifth generation, "5G" will bring us perfect real world wireless are called World Wide Wireless

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