

SEMINAR

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The Capacity of Wireless Networks for Emerging Applications

by

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Abstract: Future wireless traffic is going to be dominated by emerging applications such as VoIP, video conferencing, video/audio streaming, etc. These applications have their unique traffic patterns, performance metrics, and service requirements. Traditional network performance metrics, such as throughput, delay, and delay jitter, can no longer provide a precise characterization for these emerging applications. In this talk, we discuss two different kinds of emerging applications. We introduce an analytical framework to model these applications and practical characteristics of wireless channels. We derive the capacity regions of wireless networks for serving these applications, and develop tractable scheduling policies for achieving the capacity regions.

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