Fourth Generation Wireless: Who Needs Base Stations?

Timothy X Brown

Radio and computing advances are enabling new classes of low-cost wireless networks. These networks are peer-to-peer networks where communities of radios act as traffic sources and relays for other user's traffic. Known as "ad hoc" or "community" networks, they are faced with a number of engineering challenges and interesting opportunities. This talk will highlight the nature of these networks, discuss current approaches and unsolved aspects of these challenges, and outline the future potential for these networks.