



Mobile Wireless Network Simulations

WiPPET: Wireless Propagation and Protocol Emulation Testbed

- 1. Geography** arbitrary graph
- 2. Mobility** planned paths or random walks
- 3. Radio propagation**
 - geographically referenced (distance loss, shadow fading)
 - receiver referenced (Rayleigh/Ricean, Markovian)
- 3. Interference calculation**
- 4. Call admission protocols**
 - strongest BS, LI-DCA, ACP-DCA
- 5. Power Control**
 - Async. Distributed Power Control (uplink)
- 6. Handoff Protocols**
 - AMPS, NA TDMA, GSM, CDMA
 - RSSI-HO, SIR-HO, SIR/RSSI-HO