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Power Distribution and Performance Analysis for Wireless Communication Networks



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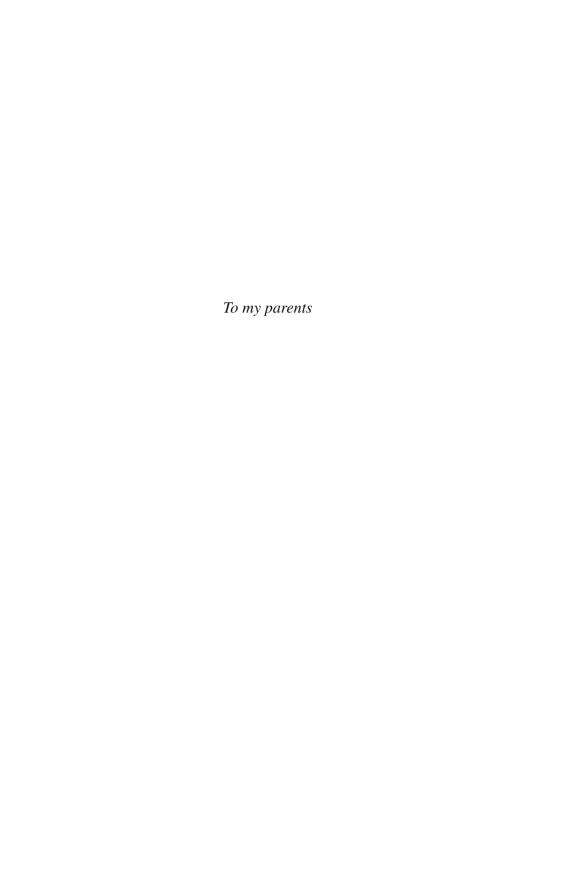
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## **Acronyms**

AF Amplify-and-forward
ARQ Automatic Repeat-reQuest
AWGM Additive white Gaussian noise

BER Bit error rate
BS Base station

CDMA Code division multiple access

CR Cognitive radio

CRN Cognitive radio network
DF Decode-and-forward
ERA Equal rate allocation
ELG Effective link gain
GP Geometric programming

Of Ocometric programming

GSM Global system for mobile communications

HHO Hard handoff

KKT Karush-Kuhn-Tucker MRC Maximum ratio combining

MS Mobile station

OFDMA Orthogonal frequency division multiple access

p2s Primary-to-secondary

PRA Proportional fair rate allocation

QoS Quality of service

RRM Radio resource management

RS Relay station

s2p Secondary-to-primary

S-AF Selection amplify-and-forward

S-D Source-to-destination

SHO Soft handoff

SINR Signal-to-interference-plus-noise ratio

TDMA Time division multiple access

WiMAX Worldwide Interoperability for Microwave Access

WLAN Wireless local area network