

SYMBOLS

b	Chunk bandwidth	α	Chunk allocation matrix
C	SNR	β	Power allocation matrix
CSI	CSI matrix	γ	Achievable datarate
EE	Energy efficiency	Γ	Required SNR gap
f	Frequency	σ	Deviation standard
F	Noise figure	μ	Mean
FI	Fairness index		
G	Gain		
H	Channel condition		
j	j-th group of user		
k	Boltzman constant		
l	l-th carrier		
L	Total aggregated carrier		
n	n-th user		
N	Total user		
P	Transmitted power		
PL	Pathloss		
r	Instantaneous datarate		
R	Coverage distance		
Rx	Receiver		
s	s-th timeslot		
SE	Spectral efficiency		
t	System temperature		
Tx	Transmitter		
v	n-th chunk		
V	Total chunk		

*Dedicated to my family, my friends, my university, and my beloved
country*