SYMBOLS

b Chunk bandwidth Chunk allocation matrix α \mathbf{C} SNR β Power allocation matrix CSI CSI matrix Achievable data rate γ **Energy Efficiency** EE Required SNR gap Γ f Frequency Deviation standard σ Noise Figure F Mean μ FΙ Fairness index tt Gain Channel condition Η k Boltzmann constant n n-th user N Total user Transmitted power P PL Path loss Instantaneous data rate r R Coverage distance RxReceiver s-th timeslot S Spectral Efficiency SE System temperature t Τx Transmitter

n-th chunk

v