List of Abbreviations

Abbreviations are listed here as used in the introductory part of this Thesis. The abbreviations used in *the Publications* may be Publication specific, and are defined within each Publication.

AR AutoRegressive

AWGN Additive White Gaussian Noise

BER Bit-Error-Rate

BPSK Binary Phase Shift Keying
CDMA Code-Division Multiple-Access
CIR Carrier-to-Interference Ratio

COSSAP Communications Simulation and System Analysis Program

DS Direct Sequence

FFT Fast Fourier Transform
FH Frequency Hopping
FIR Finite Impulse Response

GSM Global System for Mobile Communications

HM Hammerstein Model H-N Heinonen-Neuvo

IEEE Institute of Electrical and Electronics Engineers, Inc.

IIR Infinite Impulse Response

LOS Line of Sight LS Least Squares

MDL Minimum Description Length
MENN Modified Elman Neural Network

MSE Mean Squared Error MUD MultiUser Detection NN Neural Network NSF Noise Shaping Filter

PMDL Predictive Minimum Description Length

PN Pseudo Noise QF Quadratic Filtering RF Radio Frequency

SIR Signal-to-Interference Ratio

SNR Signal-to-Noise Ratio SS Spread Spectrum WGN White Gaussian Noise

WM Wiener Model