## Error probabilities in data transmissions

## Wolfgang Willems Fakultät für Mathematik Otto-von-Guericke-Universität Magdeburg

Abstract. Decoding errors can be seen from the point of view of the receiver or the transmitter. This naturally leads to different functions for the decoding error probability. We study the relations between these two functions. Though both functions are equally good when used to compare two codes with respect to decoding errors only one of them reflects in general the properties such a function should have. Moreover, both functions coincide only if the underlying code is perfect.