

# **Space-Time Coded QPSK For Rapid Fading Channels**

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## **Summary**

This paper presents the design of space-time codes suitable for rapid fading channels. The codes are designed using the QPSK signal constellation. The design of the proposed codes utilizes two different encoding methods. The first method uses a large time diversity trellis encoder, and the second one uses the I-Q encoding technique. Both methods are expected to produce space-time codes that perform better than the codes presented in the literature. The proposed codes were simulated over different Rayleigh fading channels. Coding gains up to 3 dB have been observed over similar codes in the literature

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