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Incremental-Relaying Cooperative-Networks using Amplify-and-Forward and Dual Transmit diversity with AF technique

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Abstract: A new incremental-relaying cooperative- diversity technique with a simple dual transmit diversity and amplify-and-forward scheme is presented. Closed- form expressions for the the bit error rate and the signal to noise ratio outage probability are derived using binary phase shift keying modulation scheme over independent non-identical Rayleigh fading channels. The results show that the simple space time block coding scheme with the incremental-relaying cooperative diversity outperforms the regular incremental cooperative diversity when the same transmit power is used.