



Cooperative spectrum sensing over unreliable reporting channel

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This article aims to analyze a cooperative spectrum sensing scheme using a centralized approach with unreliable reporting channel. The spectrum sensing is applied to a cognitive radio system, where each cognitive radio performs a simple energy detection and send the decision to a fusion center through a reporting channel. When the decisions are available at the fusion center, a n-out-of-K rule is applied. The impact of the choice of the parameter n in the cognitive radio system performance is analyzed in the case where the reporting channel introduces errors.

Subjects: **Other Statistics (stat.OT)**; Information Theory (cs.IT)

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