Abstract

Cognitive Radio is an emerging new paradigm in wireless communications. Its goal is to make frequency use more efficient by using temporarily unoccupied frequency bands. Therefore frequency bands have to be measured in order to decide about the occupation of the band. One of the used techniques is energy detection. In this paper different energy detection models were compared. The evaluation was performed using a simulator for an OFDM-modulation based wireless communication network.
Comparison of Energy Detection Methods in Cognitive Radio Networks

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Keywords
Cognitive-radio; energy-detection; chi-squared; OFDM(A); cyclic-prefix; simulator