



Fuzzy Logic based Optimized Relay Selection Protocol for Cooperative Wireless Network

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Abstract – Cooperative communications can be extremely proficient in combating fading multipath channels and enhance scope with complexity and cost. Furthermore there is also possibility of improving performance of cooperative communication by optimal relay selection strategies. Relay selection is a technique that can considerably increase the performance of cooperative communications. This paper presents a fuzzy logic based relay selection protocol for cooperative wireless network. The transmit power for broadcast phase is optimized by Artificial Bee Colony (ABC) algorithm. The performance of proposed system is evaluated on the basis of Bit Error Rate (BER).

Keywords – ABC, BER, BEP, Cooperative Communication.