



## **STUDY ON THE DISCRETE TIME MULTICHANNEL THREE-DIMENSIONAL PROBABILITY CSMA PROTOCOL IN WSN**

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*Abstract- With the development of the times, in the wireless sensor networks, the increasing amount of information transmission requires more advanced transmission protocols. Especially accompanied by the arrival of the era of Big Data, the conflicts between traditional transport agreement and the sudden or large amount of data are increasingly prominent. The discrete time three-dimensional probability CSMA protocol with multichannel mechanism proposed solves these problems pretty well. By the new MAC protocol to control transmission of information, so that the agreement adapts various contingencies problems in the network better and has more controllable ability. Using simulation tool-MATLAB for the accuracy of the agreement is demonstrated.*

**Index terms:** Wireless Sensor Network, three-dimensional probability, CSMA, multichannel, throughput.