A Multi-Radio Rendezvous Algorithm Based on Chinese Remainder Theorem in Heterogeneous Cognitive Radio Networks
ABSTRACT

• In recent years, the cost of wireless transceivers has fallen dramatically.
• It is more feasible for users to apply multiple radios to reduce the time to rendezvous significantly.
• In this paper, we propose a Chinese Remainder Theorem Based Multi-Radio Rendezvous algorithm for heterogeneous CRNs, where the users are unaware of the total number of channels and are allowed to have different spectrum-sensing capabilities.
EXISTING SYSTEM

• In cognitive radio networks, secondary users can utilize the temporary unused spectrum opportunistically without affecting the quality of services of the licensed users, also called primary users.

• It is a fundamental operation for a user to rendezvous with another user on the same channel and establish a communication link.

• Traditional rendezvous algorithms assume homogeneous CRNs and each user equipped with a single radio.
PROPOSED SYSTEM

• The CH approaches can be classified according to two criteria, homogeneous versus heterogeneous, and single-radio versus multi-radio.

• Most of the existing CH approaches are homogeneous single-radio approaches, which assume that there is exactly one radio equipped at SUs and SUs have the same spectrum-sensing capability.

• In this paper, we focus on the multi-radio rendezvous algorithm in distributed heterogeneous environments.

• The MTTR of homogeneous multi-radio algorithms increases with the number of channels N, such as RPS.
HARDWARE REQUIREMENTS

• Processor - Intel core i3
• RAM - 2B
• Hard Disk - 20 GB
SOFTWARE REQUIREMENTS

• Operating System : LINUX
• Tool : Network Simulator-2
• Front End : OTCL (Object Oriented Tool Command Language)
REFERENCE


