Motivation
- Supporting orthogonal range search on point data
- Fault tolerance
- Scalability
- Low number of messages
- Dynamic addition and deletion of nodes and data

Peer-to-Peer (P2P) Systems
- Each node is a supplier and consumer of data
- Data identified by keys
- Communication is by send and receive message passing

Objectives
- Is there a linear space distributed spatial data structure that supports optimal worst case $O(\sqrt{n} + k)$ messages for Q(2,2) range search?
- Can redundancy be added permitting any one node to be off-line and still answer any 2-d range query?