



**RESEARCH ARTICLE**

# Receiver Based Geographic Multicast Routing in Ad Hoc Networks

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***Abstract— Existing multicast routing protocols uses multicast trees (or mesh) where receiving nodes maintains routing information. In sensor networks where traffic is bursty, this multicast state maintenance adds a large amount of overhead to the routing. Thus, we have developed a stateless receiver-based multicast geographic routing protocol that simply embeds list of the multicast members (e.g., sinks), in packet headers. The receivers will decide the best way to forward the multicast load. This protocol, called RBGeographicMulticast exploits the knowledge of the geographic locations of the nodes to remove the need for costly state maintenance (e.g., tree/mesh/neighbour table maintenance), making it ideally suited for Ad hoc network multicast applications.***

***Key Terms: - Mobile ad hoc networks; multicast regions; virtual node; location; geographic multicasting***

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