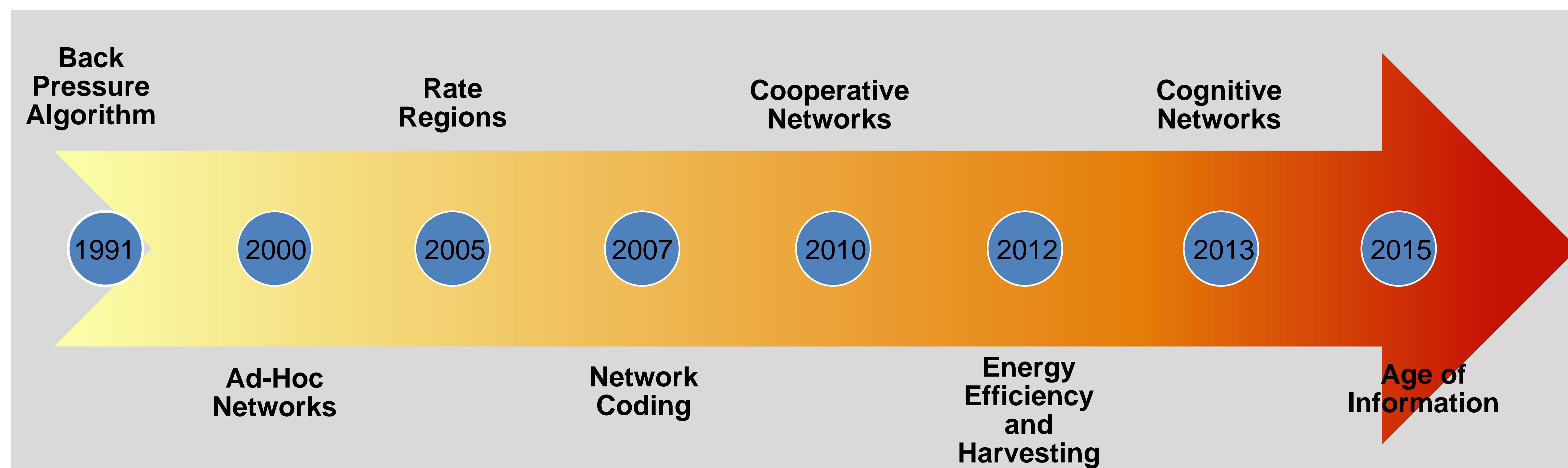


Wireless Networks

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Paradigm shift in networking

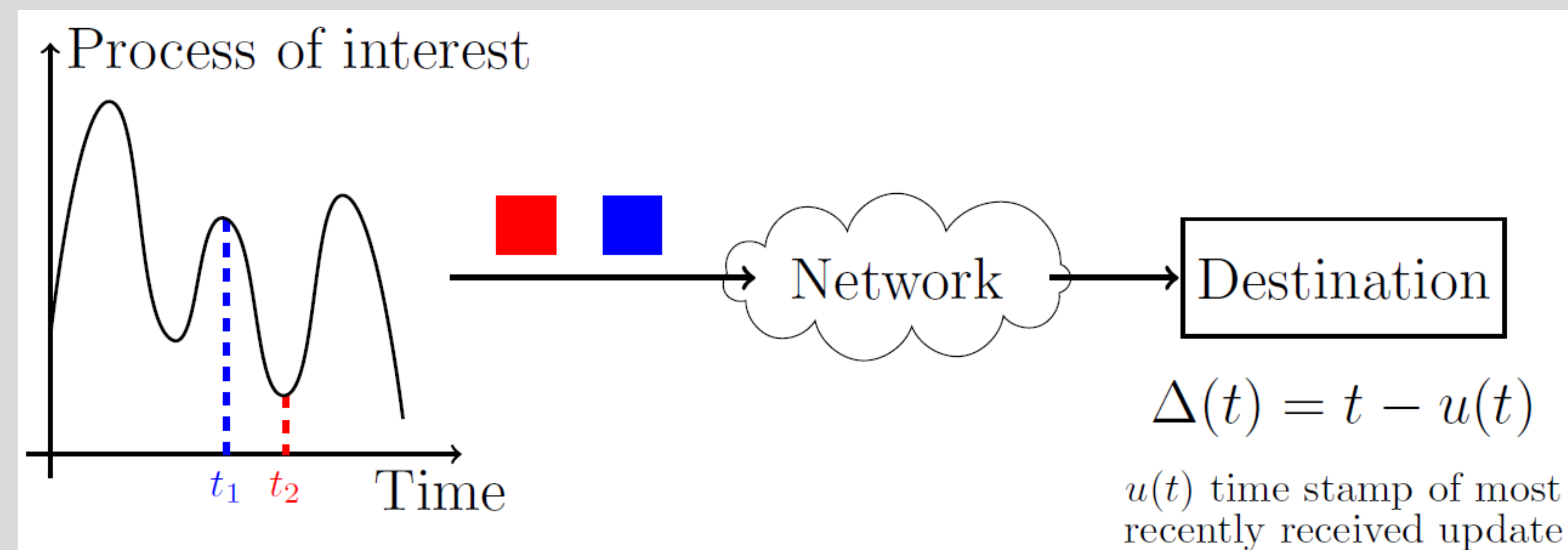
- Virtual User
- Service Oriented Design

Adaptation to wireless networks

Age of Information (with Maice Costa, 2013 to present)

Status Update Systems

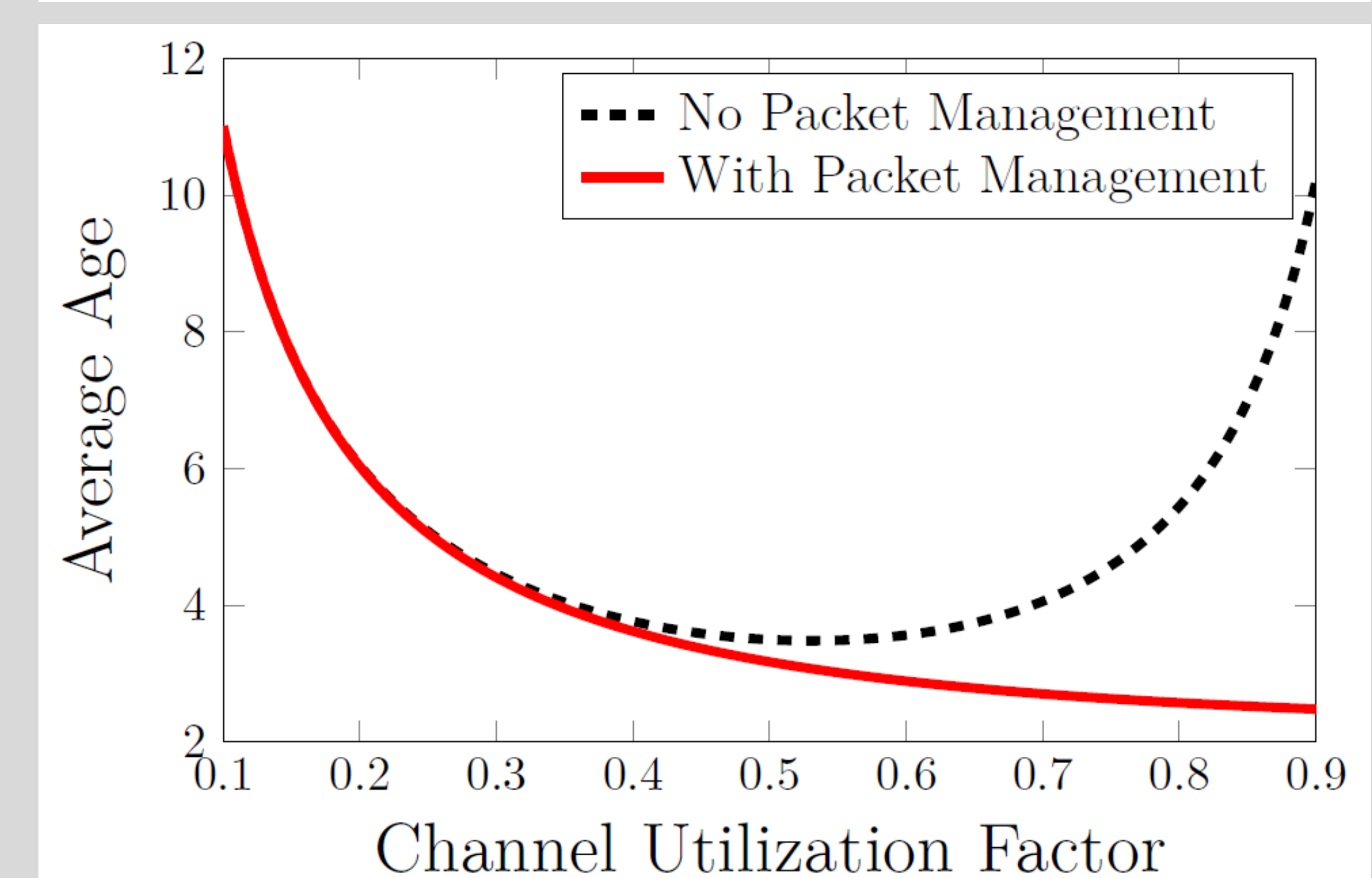
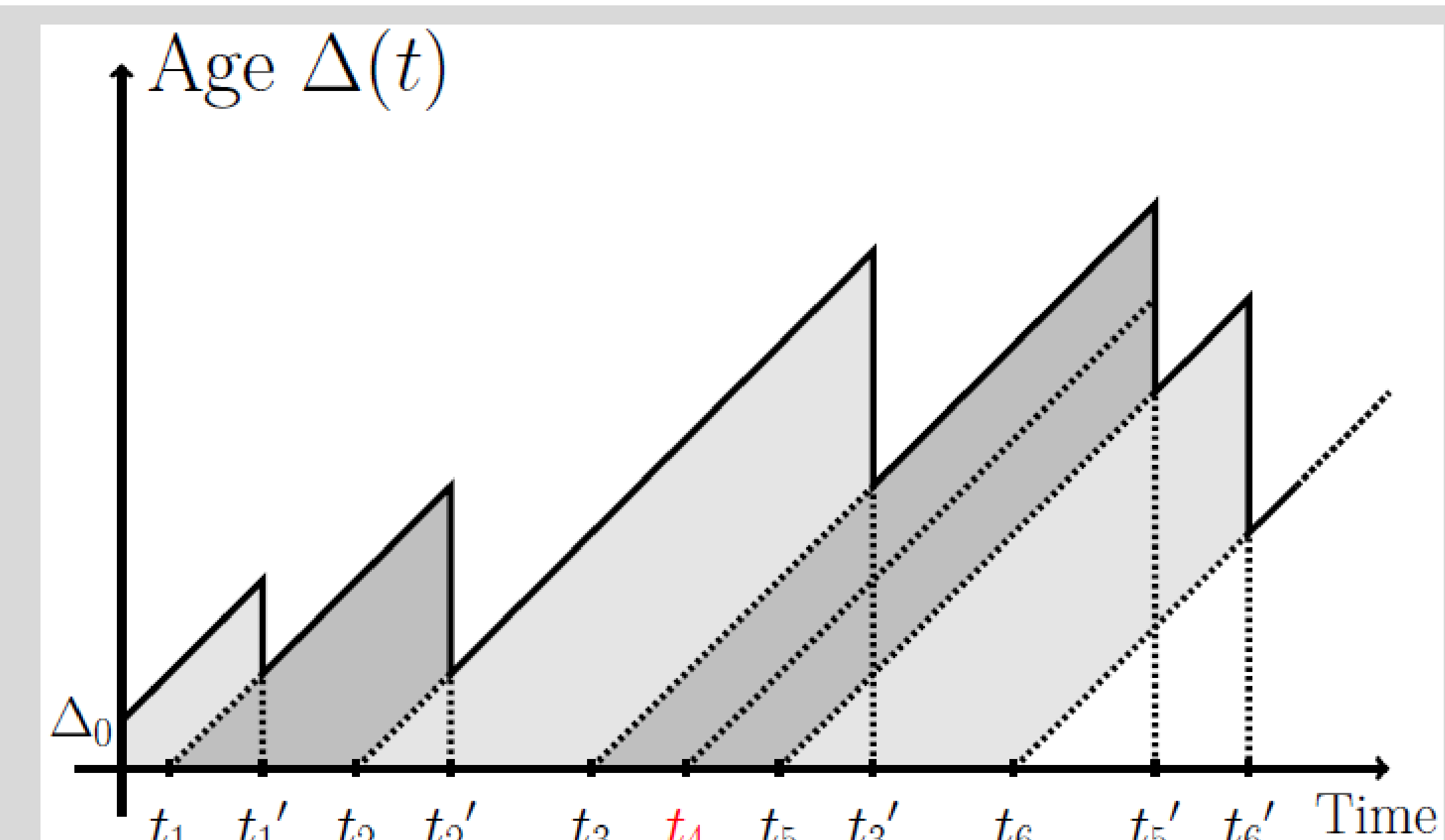
- How often to send status update messages under resource constraints?
- Minimizing the age is not equivalent to maximizing throughput or minimizing delay



Applications

- Sensor Networks
- Vehicular Networks
- Ad Hoc Networks
- Control Systems
- Caching
- Routing
- Inventory control

- New concept, theory under development
- Relevant in systems concerned with timeliness of status updates
- Autocorrelation of the process to be considered in definition of *effective age*
- Information theoretic repercussions yet to be understood



(Costa, Codreanu, and Ephremides, "Age of Information with Packet Management", ISIT, 2014)