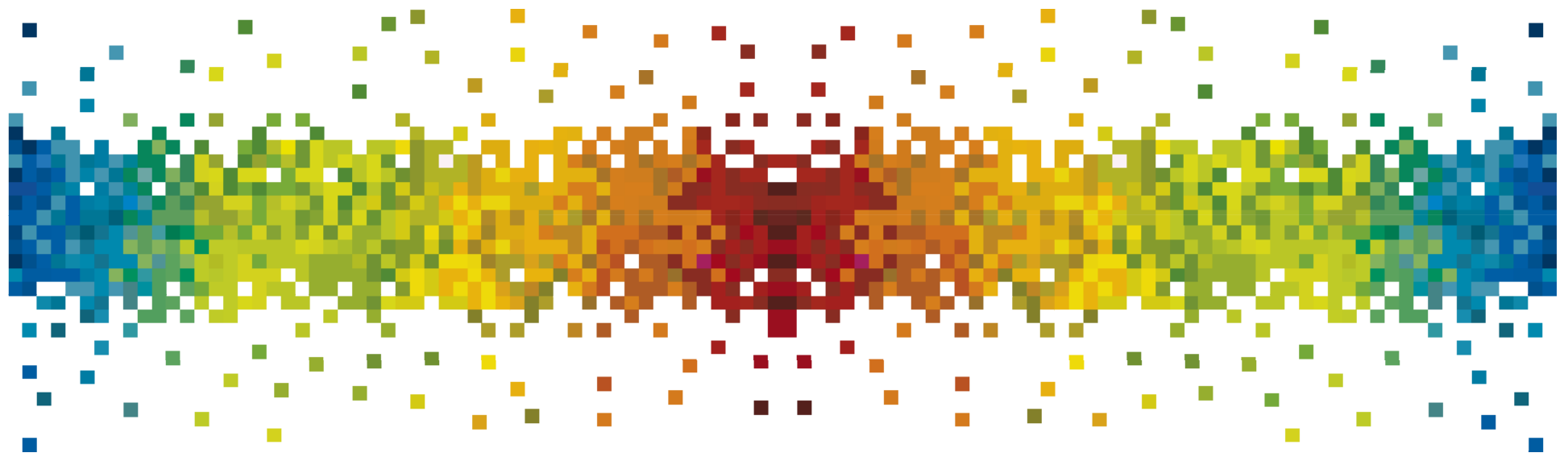


# digiteo

Research in science and technology of information

## FORUM ANNUEL / 21 OCTOBRE 2009



Samir Tohmé Université de Versailles

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Réseaux du futur et réseaux de capteur



# Future Networks within the scope of Digiteo Scientific Program

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- Future Networks : one among four transversal topics
- Scope :
  - Mobile networks
  - Network coding
  - Network information theory
  - Performance evaluation
  - All optical networks
  - Algorithmic aspect for cooperation between selfish operators
  - Radio



# Mobile networks and radio and all optical networks issues

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- Routing protocols in wireless ad hoc networks
- Optical packet / burst routing, media access methods
- QoS issues and resources allocation (in wireless / optical networks)
- QoS oriented routing
- Mobility management
- Dynamic spectrum allocation and cognitive radio issues



- Network information theory : explore the performance limits of wireless networks
- Performance evaluation using new analytical, numerical, approximation or bounds to analyse and optimize the network design
- Algorithmic aspect for cooperation between selfish operators



# Networking topics within System@TIC Cluster

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- Three main topics
  - Wireless networks
  - Optical networks
  - Services
- The wireless networks topic main issues :
  - Sensor networks
  - WLAN, WMAN and WRAN networks
  - Cellular networks
  - Access transparency within heterogeneous networks

