Instituttseminar 6. september og resten av hausten

I haust vil instituttseminaret bli lei av ein troika: Dag Haugland, Michal Walicki, Øyvind Ytrehus

Fyrste førelesing er 6. september kl. 1415 (Auditorium 2144, HIB):

Spatially Critical Sensor and Actuation Networks

By Brian S Hoyle,

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Overview

Sensor and actuation networks offer a generic platform from which a wide range of applications can be realised in many fields. Many candidate applications have a spatially critical aspect, from environmental monitoring and control to security and surveillance. Communication networks have enabled many distributed applications, and have exploited a wide range of network topologies and technologies.

The presentation reviews the needs of spatially critical applications and proposes new methodologies that aim to exploit wired and wireless sensor and actuation networks to deliver efficient implementations. It contrasts a classical centralized network solution in which spatially critical data will typically be offloaded for analysis; with a smart network solution, which features inter-node cooperation pivoting upon location, and is able to track specified application properties dynamically. A number of examples are discussed.