# DAUIN LUNCH SEMINAR

## Enrico Masala

**Professore Associato Dipartimento di Automatica e Informatica (DAUIN) presso il Politecnico di Torino**

# NEW STANDARS FOR MULTIMEDIA STREAMING SYSTEMS

mercoledì
**17/10/18**

**POLITECNICO DI TORINO**

Dipartimento di Automatica e Informatica

## ABSTRACT

Digital multimedia communications are an essential part of our daily life. We interact with a large number of multimedia-capable devices every day, ranging from mobile phones to smart TV sets.

Moreover, the possibility to use new channels such as Internet pushed the development of new innovative and personalized communications services, notably including also traditional broadcast services (live TV). This revolution is made possible on one hand by the increase of the Internet bandwidth available for each user, both in the fixed and mobile scenario, and on the other hand by improved multimedia coding and communication technologies that allow systems to work even in difficult communication scenarios.

The goal of this talk is to present an overview of the current situation of the standards and technologies for on-demand video services, with particular reference to recently developed codecs and communication optimization algorithms to improve the overall system quality as perceived by the final user.

More specifically, the talk will overview video coding standards such as HEVC by MPEG but also and its royalty-free competitor AV1, the underlying principles of HTTP streaming techniques which are used almost everywhere for Internet video delivery and how perceived video quality can be evaluated in such scenarios.

## BIOGRAPHY

Enrico Masala received the Ph.D. degree in Computer Engineering in 2004 from the Politecnico di Torino, Turin, Italy. In 2003 he was a Visiting Researcher at the Signal Compression Laboratory, University of California, Santa Barbara, hosted by prof. K. Rose, where he worked on joint source channel coding algorithms for video transmission. He worked with the Internet Media group first as a post-doc researcher. Since 2011 he is member of the Control and Computer Engineering Department at the Politecnico di Torino. His main research interests include the development of algorithms for multimedia quality optimization of communications over packet networks with particular emphasis on video and special attention to particular contexts (e.g., remote control applications) and new technologies (e.g., 3D video, cloud for multimedia). He is a Senior Member of the IEEE and member of the PIC4SeR Politecnico di Torino Interdepartmental Center for Service Robotics.

**ore 12.30/13.30**

## Sala Conferenza "Luigi Ciminiera"
**Corso Castelfidardo 34/D Torino**

www.dauin.polito.it

**Ingresso libero fino ad esaurimento posti.**
Per informazioni: **francesco.ruggiero@polito.it**
Sarà disponibile un leggero rinfresco per coloro che si saranno registrati entro il 15 ottobre su: **https://dauin_lunch7.eventbrite.com**

Il ciclo di incontri dei "Dauin Lunch Seminar" avrà luogo ogni terzo mercoledì del mese dalle ore 12.30 (in punto) fino alle ore 13.30.