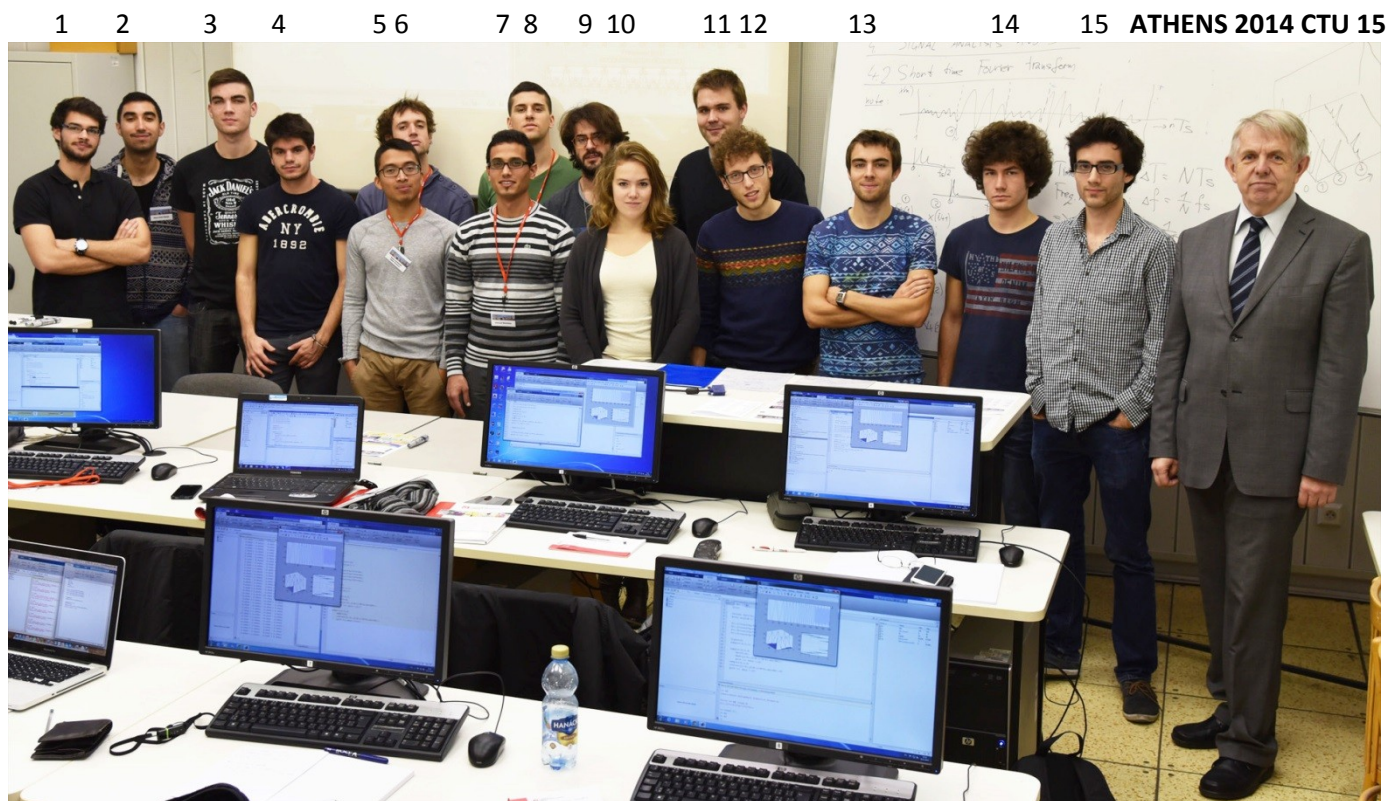


DIGITAL SIGNAL AND IMAGE PROCESSING WITH APPLICATIONS

Prof. Aleš Procházka

Programme ATHENS: CTU15 - November 17-21 2014
Advanced Technology Higher Education Networks, Socrates



1 Rui Vasconcelos, IST Lisboa

2 Ozan Firat Özgül, KU Leuven

3 Guillermo Rincón Gracia, Madrid

4 Daniel Rodríguez Jiménez, Madrid

5 Raul Antonio Rosa Padilla, Milano

6 Simon Evain, ParisTech

7 Ahmad Khatoun, KU Leuven

8 Mirko Casnedi, Milano

9 Pietro Ilacqua, Milano

10 Marine Petriaux, ParisTech

11 Tobias Wurzer, TU München

12 Fabio Centonze, Milano

13 Nicolas Judalet, ParisTech

14 Ben De Wit, KU Leuven

15 Clément Roig, ParisTech

FINAL PRESENTATIONS

Friday 21 November 2014, Room A40,

Department of Computing and Control Engineering ICT Prague

12:50 Casnedi Mirko

13:00 Centonze Fabio

13:10 De Wit Ben

13:20 Evain Simon

13:30 Ilacqua Pietro

13:40 Judalet Nicolas

13:50 Khatoun Ahmad

14:00 Özgül Ozan Firat

14:10 Petriaux Marine

14:20 Rincón Gracia Guillermo

14:30 Rodríguez Jiménez Daniel

14:40 Roig Clément

14:50 Rosa Padilla Raul Antonio

15:00 Vasconcelos Rui

15:10 Wurzer Tobias

Artificial neural networks in adaptive signal processing

Discrete Fourier transform

Traffic data processing

Canny edge detector

Principles of artificial neural networks

Prediction of oil consumption with autoregressive model

Noninvasive EEG - BCI based on visual evoked potentials

Phase synchrony analysis in EEG signals

Principles of wavelet transform, signal decomposition and reconstruction

Mathematical modelling of physical systems

Convolution and its use in spectral analysis and filtering

Two-dimensional discrete Fourier transform in image analysis

Z-transform, its definition and use

Identification of thermal systems

Fourier cosine series expansions for pricing European options