

2nd BIOART Workshop

Signal Processing for Biomedical Engineering

David Luengo

I. GENERAL INFORMATION

The meeting will take place at the facilities of “Universidad Politécnica de Madrid” (UPM) at four different locations:

- **Monday, Tuesday and Thursday:** “Escuela Técnica Superior de Ingeniería y Sistemas de Telecomunicación” (ETSIST), located at C/Nikola Tesla s/n in UPM’s “Campus Sur” (South Campus). Meetings at the School will take place at room A3002. The campus can be easily reached by public transport through the Railway (stop: VALLECAS) or Metro (stop: SIERRA DE GUADALUPE) network.
- **Wednesday:** “Centro de Tecnología Biomédica” (CTB) and “Escuela Técnica Superior de Ingeniería de Telecomunicación” (ETSIT). Transportation by bus will be provided from ETSIST for the visit to CTB and ETSIT.
- **Friday:** “Escuela Técnica Superior de Ingeniería Industrial” (ETSII), located at C/José Gutiérrez Abascal 2 in downtown Madrid. ETSII can be easily reached by Metro (stops: GREGORIO MARAÑÓN or NUEVOS MINISTERIOS) or even by foot depending on the accommodation’s place of each partner.

See the accompanying file for further information on transportation around Madrid.

II. MONDAY (28 JAN. 2019)

The meeting will take place at room A3002 of ETSIST.

- 10:15 – 10:30** Arrival of partners at ETSIST.
- 10:30 – 10:45** Welcome and Workshop Overview [David Luengo].
- 10:45 – 11:30** Partner Change: Current Status & Presentation of KU Leuven [Peter Arras].
- 11:30 – 12:15** Meeting Calendar: Dates for Next Meetings.
- 12:15 – 13:00** External Evaluator: Discussion & Appointment.
- 13:00 – 15:00** Lunch at *Donde Ceci* (C/Arboleda, 14).
- 15:00 – 18:00** Discussion about Curricula, Working Groups & Courses.

III. TUESDAY (29 JAN. 2019)

The meeting will take place at room A3002 of ETSIST.

- 10:15 – 10:30** Arrival of partners at ETSIST.
- 10:30 – 11:15** Dissemination: Website, Book & Other Activities.
- 11:15 – 12:00** Presentation about the School's BSc/MSc/PhD programs.
- 12:00 – 12:30** Coffee break.
- 12:30 – 13:30** Visit to the Dep. of Signal Theory and Communications Labs. (2 groups):
 - Anechoic & Reverberant Chambers.
 - RF Labs.
 - Audio/Acoustics Lab. & Music Recording Studio.
 - Image Lab. & TV Recording Studio.
- 13:30 – 15:00** Lunch at the *School's Cafetería*.
- 15:00 – 16:30** Financial Management: Mid-Term Report, Equipment & Staff Costs.
- 16:30 – 17:00** Coffee break.
- 17:00 – 18:00** Visit to the School's Labs. & Museum (2 groups):
 - Telecommunications Museum.
 - Digital Home.

IV. WEDNESDAY (30 JAN. 2019)

- 09:15 – 9:30** Arrival of partners at ETSIST.
- 09:30 – 10:30** Pickup and transfer by bus to Biomedical Technology Centre (CTB).
- 10:30 – 11:00** Welcome and presentation of CTB [Gustavo Guinea (CTB's Head) and Francisco J. Rojo (CTB's Deputy Head)].
- 11:00 – 13:00** Visit to CTB Labs. (2 groups):
 - Cognitive Neuroscience – Magnetoencephalography (MEG)
 - Biomaterials and Regenerative Engineering
 - Cajal Blue Brain
 - Bioinstrumentation
- 13:00 – 13:30** Farewell and end of visit.
- 13:30 – 15:00** Lunch at CAIT.
- 15:00 – 15:30** Pickup and transfer by bus to Telecommunications Engineering School (ETSIT).
- 15:30 – 15:45** Reception at the Hall of Building A.

- 15:45 – 17:00** Presentation of the School at the Degrees Hall.
- 17:00 – 17:15** Library.
- 17:15 – 17:30** Anechoic Chamber.
- 17:30 – 18:30** Lab. Visits (2 groups):
- Optoelectronic Systems and Microtechnology Institute (ISOM)
 - Living Lab.
- 18:30 – 19:00** Farewell and end of visit.

V. THURSDAY (31 JAN. 2019)

The meeting will take place at room A3002 of ETSIST.

- 09:30 – 10:00** Arrival of partners at ETSIST.
- 10:00 – 11:30** Presentations:
- On-Line Learning [Eli Shmueli].
 - Sensors [César Benavente]
- 11:30 – 12:00** Coffee break.
- 12:00 – 13:30** Presentations:
- Signal Recognition Techniques: Evaluating through Challenges [Juana M. Gutiérrez-Arriola & Rubén Fraile]
 - Biomedical Digital Signal Processing [David Luengo]
- 13:30 – 15:00** Lunch at the *School's Cafetería*.
- 15:00 – 16:30** Presentations
- Sparse Inference for ECG Signals [David Luengo]
 - Biometry [David Meltzer]
- 16:30 – 17:00** Coffee break.
- 17:00 – 18:30** Multilateral meetings among partners.

VI. FRIDAY (1 FEB. 2019)

The meeting will take place at Aula D of ETSII.

- 9:45 – 10:00** Arrival of partners to ETSII.
- 10:00 – 10:30** School's Presentation.
- 10:30 – 11:30** Presentations (TBD):
- Power Electronics [José A. Cobo & Miguel Jiménez-Carrizosa].

- Robots & Intelligent Machines [Roque Saltarén].
- Design in Bioengineering [Andrés Díaz Lantada].

11:30 – 12:00 Coffee break.

12:00 – 13:30 Lab. Visits (3 groups):

- Automatics and Robotics Research Center (CAR).
- Industrial Electronics Center (CEI).
- Product Development Lab.

13:30 – 15:30 Lunch.

15:30 – 18:30 Multilateral meetings among partners.

VII. PRACTICAL INFORMATION

A WiFi account has been set up for the meeting:

- **Network:** InvitadosUPM
- **User:** BioArt
- **Password:** BioArt19

Additionally, the EDUROAM WiFi network should be accessible during the meeting at all the locations. Already registered users should be able to connect using the same credentials that they use at their home institution.

VIII. LIST OF PARTICIPANTS

Partner	Acronym	Participant	E-Mail
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