

Scientific/Educational Workshop

Workshop title

Hybrid FES-Robotic Rehabilitation Systems

Workshop responsible

Erika G. Spaich (Aalborg University)

Speakers

Nitin Sharma;
Thierry Keller;
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Juan Moreno;
Erika G. Spaich

Workshop goals

The purpose of this workshop is two-fold: to present a series of technological solutions that combine FES with robotics to support rehabilitation and to allow participants to try some of these technologies in the context of a hands-on activity.

Abstract

Hybrid technologies have great potential since they can potentiate the benefits of the individual technologies and at the same time, counteract some of their weaknesses. In the workshop, different experiences about combining robotic devices and FES technologies will be presented and discussed in an open forum with the audience. Focus will be put, not only on the technical aspects of these solutions but also on the requirements for their implementation in the clinic. These include the necessary knowledge to apply the hybrid technologies, possible modification of the work processes, and acceptance by all the users (patients and health care professionals). It is expected that this workshop will be of interest for participants from different backgrounds, since it incorporates technical elements of robotics, FES, and rehabilitation technologies, and their clinical application.