

# Congreso de Métodos Numéricos en Ingeniería

Bilbao, 25-28 Junio, 2013

## **ST43: Biomecánica y Biomecatrónica**

*Thematic Session in*

*Biomechanics and Biomechatronics*

Session Organizers:

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### **Scope**

The field of Biomechanics and more recently the field of Biomechatronics are registering tremendous advances due to the societal impact that these areas of research – and the new findings that they are bringing to light – have in the quality of life of normal people in general, and of disabled people in particular. The ever-increasing technological advances – with faster computers and powerful, lighter and energetically efficient actuators – allow nowadays to engineer and design assistive and/or enhancing solutions that were beyond ones imagination only a few years ago. The aim of this Thematic Session is to bring forward and discuss the actual state-of-technology in the field of Biomechanics and Biomechatronics, presenting theoretical, computational and/or experimental research in areas such as prosthetics, orthotics, assistive solutions for locomotion or manipulation, enhancement of human movement, biped locomotion, energy consumption, human-machine systems' dynamics, control and stability, just to name a few. Researchers working in the referred areas or in others that were not mentioned above but that are related to the theme are invited to present their research work in this session.