

ADVANCES IN CHARACTERIZATION AND MODELING OF BIOLOGICAL SOFT TISSUES

TRACK NUMBER: 400 BIOMECHANICS AND MECHANOBIOLOGY

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Key words: Computational biomechanics, soft tissue, characterization, modeling, data uncertainty and propagation.

ABSTRACT

Understanding the complex multiphysical behaviours and multiscale interactions of biological soft tissues plays an important role in the diagnostic and treatment of disorders. Novel measuring protocols and powerful computational approaches are commonly developed to characterize and model biological soft tissues under physiological and pathophysiological conditions. Thus, new knowledge could be extracted and used for clinical decision support.

This mini-symposium aims to bring together different scientific communities to present methodological approaches as well as practical applications related to the characterization and modeling of biological soft tissues. In this mini-symposium, the following subjects are welcomed:

- Characterization of biological soft tissues at multiple length scales
- Parameter identification and inverse problems for biological soft tissues
- Modeling of biological soft tissues at multiple length scales
- Data uncertainty and propagation