Workshop Topics - Abstract Titles

On the following pages, you can find the abstract titles and authors of the workshops, according to their workshop main topic.

The List is not yet complete, further topics will be added as soon as possible.
Workshop 1: 11.00h - 16.00h
The Finite Elements Method in Biomedical Engineering, Biomechanics and Related Field

FE-Analyse des Knochenwachstums um enossale Zahnimplantate mit und ohne Knochenverdichtung
M. Flach*
*Fachhochschule Koblenz

Finite element simulation of skeletal muscle behaviour under tetanic and non-tetanic conditions
M. Böl*, S. Reese*
* Institute of Solid Mechanics, TU-Braunschweig

Different forms of material damping in a model of the middle ear
M. Bornitz*, T. Zahnert*, H.J. Hardtke**
* Dept. of Medicine, Clinic of Otorhinolaryngology, Technical University Dresden
** Dept. of Solid State Mechanics, Technical University Dresden

Finite Element Analysis of a New Proximal Femoral Nail (PFN-A)
P. Helwig*, G. Faust**, U. Hindelang***, B. Kröplin**, N. Südkamp*
*Department Orthopädie und Traumatologie, Albert-Ludwigs-Universität Freiburg
**Institut für Statik und Dynamik der Luft- und Raumfahrtkonstruktion, Universität Stuttgart
***LASSO Ingenieursgesellschaft, Leinfelden-Echterdingen

Influence of Periodontal Ligament on Initial Tooth Mobility: A FEM Study
A. Hohmann*, C. Kober**, P. Young***, M. Geiger*, A. Boryor*, C. Dorow*, C. Sander*, F.G. Sander*
*Dept. of Orthodontics, University of Ulm, Germany
**Faculty of Engineering and Computer Science, Univ. of Applied Science Osnabrueck
***School of Engineering, Computerscience & Mathematics, Univ. of Exeter, UK

Dental vs mandibular biomechanics: the influence of the PDL on the overall structural behaviour
*Faculty of Engineering and Computer science, Univ. of Applied Science, Osnabrueck
^Zuse Institute Berlin
°Institute for Mechanics of Materials and Structures, Vienna Univ. of Technology, Austria
 Univ. of Frankfurt, Germany
University Hospital Basle, Switzerland
Center of Advanced Studies in Cranio-Maxillo-Facial Surgery, TU Munich, Germany
Study of the interaction between geometry and mechanical behaviour of a lumbar spine model – consequence on the validation
* Reference Center for Bioengineering of Catalonia, Biomaterials and Biomechanics Division, Department of Materials Science, Universitat Politècnica de Catalunya, Spain
** Institute of Orthopaedic Research and Biomechanics, Univ. of Ulm, Germany

Simulation of fracture healing in metaphyseal bone
U. Simon*, S.J. Shefelbine**, P. Augat***, L. Claes*
*Insitute for Orthopaedic Research and Biomechanics, Univ. of Ulm, Germany
**Dept. of Bioengineering, Imperial College, London UK
***Biomechanics Research Laboratory, Trauma Center Murnau, Germany

The finite Element Methods in Minimal Access Surgery
C. Song*
*Dept. of Surgery & Molecular Oncology, Ninewells Hospital and Medical School, University of Dundee, Scotland

Stress Distribution and Displacement Analysis during an intermaxillary Disjunction – a three dimensional FESA Study of human skull
A. Boryor*, M. Geiger*, A. Hohmann*, A. Wunderlich**, F. Günter Sander*
*Dept. of Orthodontics, University of Ulm, Germany
**Dept. of Diagnostic Radiology, University of Ulm