



5th World Congress of Biomechanics

incorporating the
15th Congress of the European Society of Biomechanics
31st Congress of the Société de Biomécanique
4th ESEM International Symposium on Microdamage

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. Böhl*, S. Reese*

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Different forms of material damping in a model of the middle ear

M. Bornitz*, T. Zahnert*, H.J. Hardtke**

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Finite Element Analysis of a New Proximal Femoral Nail (PFN-A)

P. Helwig*, G. Faust**, U. Hindelang***, B. Kröplin**, N. Südkamp*

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***Institut für Statik und Dynamik der Luft- und Raumfahrtkonstruktion, Universität Stuttgart*

****LASSO Ingenieurgesellschaft, 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

C. Kober*, B. Erdmann**, C. Hellmich***, S. Stuebinger[^], R. Sader[°], H.F. Zeilhofer[^]

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Study of the interaction between geometry and mechanical behaviour of a lumbar spine model – consequence on the validation

J. Noailly*, D. Lacroix*, J.A. Planell*, H. Schmidt**, F. Heuer**, H.J. Wilke**

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Simulation of fracture healing in metaphyseal bone

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The finite Element Methods in Minimal Access Surgery

C. Song*

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Stress Distribution and Displacement Analysis during an intermaxillary Disjunction – a three dimensional FESA Study of human skull

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