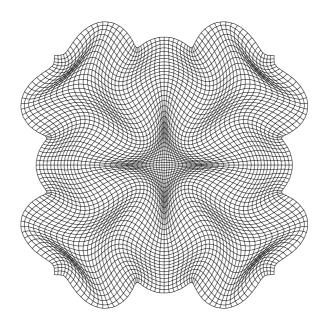
FORMULATIONS AND CONSTITUTIVE LAWS FOR VERY LARGE STRAINS

Edited by Jiří Plešek

PROCEEDINGS OF EUROPECH COLLOQUIUM 450 PRAGUE, CZECH REPUBLIC OCTOBER 3-5, 2001

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Edited by Jiří Plešek

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Preface

The Euromech Colloquium Formulations and Constitutive Laws for Very Large Strains was held at the Institute of Thermomechanics, Prague during 3rd to 5th October 2001. The colloquium brought together researchers interested in the theoretical development and experimental assessment of constitutive models, capable of describing finite strain situations, as well as those who were concerned with their computer implementation. Forty two scientists from fourteen countries attended.

A number of topics were addressed, ranging from theoretical issues in hyperelasticity, finite strain plasticity and localization, including relevant computational procedures, to the discussion of recent experimental findings. On the theoretical part, the reconciliation of Lagrangian formulation, which was frequently used for stress evaluation, with the Eulerian description, suitable for modelling inelastic flows, was recognized as the main challenge to the current research.

Although the Euromech colloquia, being small meetings, are usually not supposed to issue proceedings, most participants expressed their will to supply the full length versions of their papers for publication. The editor would like to thank all the contributors who made the colloquium and this book possible. Deep gratitude is also extended to all the members of the local organizing committee. The help of Ms. Stibralová and Mr. Novák is particularly appreciated.

June 2002 J. Plešek

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