PIMS / AMI /
Mechanical Engineering Seminar

Tuesday, October 30, 2012
3:30 p.m.
MEC 2-3

"On the mechanics and mathematics of bodies described by implicit constitutive equations"

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Abstract

After discussing the need for implicit constitutive relations to describe the response of both non-linear fluids and solids, I will discuss applications wherein they can be gainfully exploited. It will be shown that such implicit relations can explain phenomena that have hitherto defied adequate explanation. Moreover, such implicit constitutive relations possess characteristics which are desirable both from the point of view of qualitative and numerical analysis.