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Recent Progress in Models and Analysis of Contact Processes

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Abstract

We describe some recent models, derived from thermomechanical considerations, for the following processes involved in contact between deformable bodies: friction, wear, adhesion. Then, we describe some recent analysis results dealing with such models. These deal with existence and uniqueness of the solutions for either the quasistatic or dynamic models, and involve either the normal compliance or the Signirini contact conditions.