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Quasistatic contact problem with time delay for viscoelastic materials

We consider the mathematical model which describes quasistatic frictional contact problem between a deformable body and a rigid foundation. In this model the contact is bilateral and the behaviour of the material is described by viscoelastic constitutive law with time delay. The variational formulation of the mathematical model is given as a hemivariational inequality of elliptic type. Based on some recent result for the elliptic hemivariational inequality and Banach's fixed point theorem we prove an existence and uniqueness of the solution for the obtained hemivariational inequality.