

Control problems for integro-differential equations.

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The aim of this talk is to give a survey of some results in control theory for second order evolution equations with memory. Under suitable assumptions on the convolution kernels, we will show global existence and asymptotic behaviour for the solutions of some nonlinear equations. Moreover, a reachability result for integro-differential equations with exponential type kernels will be given.

All these results can be applied to problems in viscoelasticity.