ORDINARY AND PARTIAL INTEGRO-DIFFERENTIAL EQUATIONS WITH APPLICATIONS IN GLASS-RHEOLOGY.

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ABSTRACT. Physical applications in glass transition lead to initial-value problems for ordinary integro-differential equations characterized by nonlinear memory-convolution terms with kernels that depend on the solutions of these equations. This talk will give an overview of results on well-posedness and asymptotic behaviour. In addition to the physically relevant equations of ordinary type, we will consider some mathematically motivated problems for partial integro-differential equations with convolutions in the time variable.

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