A STUDY ON THE GEVREY REGULARITY FOR SOLUTIONS OF SYSTEMS OF PARTIAL DIFFERENTIAL EQUATIONS

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The purpose of this minicourse is giving a general idea of the problem of the Gevrey hypoellipticity of linear partial differential operators, as well as some related topics. We present the important concept of the Gevrey vectors, its development during the last decades, including recent contributions in this area and its connection with the problem of the Gevrey regularity. Finally, we discuss the problem of the microlocal Gevrey regularity for solutions of nonlinear systems of first order partial differential equations.

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