A PROOF OF THE MALGRANGE – EHRENPREIS THEOREM BY HILBERT SPACE METHODS

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The famous Malgrange - Ehrenpreis theorem states that a non-zero linear partial differential operator with constant coefficients has a fundamental solution in the space of distributions, or generalized functions. The aim of this talk is to give a complete and extended account of a very interesting proof by Rosay. This proof is "Hahn - Banach and Fourier - free" and uses only methods from Hilbert space.

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