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THE FBI TRANSFORMS AND THEIR USE IN (MICROLOCAL) ANALYSIS

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Resumo

We shall consider a larger class of FBI transforms: those introduce by Berhanu and Hounie (the real part of the Hessian of the phase function can degenerate at the point of interest), and show that it can be used to characterize the classes of ultradifferentiable functions, also know as Denjoy-Carleman classes, (which contain the Gevrey classes). Applications are given, in particular we show that the FBI introduced by Christ, can be viewed as an example of the BH-FBI. This is a joint work with Renan Medrado (UFSCar).