Operator algebras in Gabor analysis

Franz Luef

(University of Vienna)

May 20, 2005

We present some results on the structure of Gabor frames in the light of noncommutative geometry, especially about equivalence bimodules for some noncommutative tori. As a consequence we get a description of some theorems of Rieffel in terms of Gabor analysis. We also show that Feichtinger's algebra is an equivalence bimodule for certain convolution algebras.