

Meeting: 1007, Santa Barbara, California, SS 5A, Special Session on Noncommutative Geometry and Algebra

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Quasicoherent sheaves on noncommutative tori. Preliminary report.

We will discuss the category of quasicoherent sheaves on noncommutative tori extending the category of holomorphic bundles on them. Using the notion of a rank of such a sheaf (that takes all positive real values) we define the category of quasicoherent sheaves on a generic point of a noncommutative torus. We show that this category is governed by a certain semihereditary ring. (Received February 04, 2005)