

TOWARDS TRANSVERSE TORIC GEOMETRY

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ABSTRACT

We say that an effective action of a compact torus G on a connected smooth manifold M is *maximal* if there exists a point $x \in M$ such that $\dim G + \dim G_x = \dim M$. On the other hand, a compact connected complex manifold equipped with a compact torus action has a holomorphic foliation coming from the torus action. In this talk, we discuss a classification of compact connected complex manifolds with maximal torus actions up to transversely equivalence. If time permits, we also discuss the basic cohomology and basic Dolbeault cohomology of such manifolds.

This talk is based on a joint work with Roman Krutovsky and Taras Panov.

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