Mathematics > Algebraic Geometry

Singular foliations with trivial canonical class

Frank Loray, Jorge Vitorio Pereira, Frederic Touzet

(Submitted on 7 Jul 2011 (v1), last revised 17 Dec 2011 (this version, v3))

This paper is devoted to describe the structure of singular codimension one foliations with numerically trivial canonical bundle on projective manifolds. To achieve this goal we study the reduction modulo p of foliations, establish a criterium for uniruledness of projective manifolds, and investigate the deformation of free morphisms along foliations. This paper also contains new information about the structure of codimension one foliations on $\P^n$ of degree smaller than or equal to $2n-3$.

Comments: 48 pages. Major revision. The content of Sections 4 and 5 of the previous versions have been moved to 'The classification of foliations with trivial canonical bundle on Fano 3-folds'

Subjects: **Algebraic Geometry (math.AG)**; Complex Variables (math.CV); Dynamical Systems (math.DS)

Cite as: **arXiv:1107.1538 [math.AG]**

(or **arXiv:1107.1538v3 [math.AG]** for this version)

Submission history

From: Jorge Vitorio Pereira [view email]

[v1] Thu, 7 Jul 2011 23:55:55 GMT (74kb)

[v2] Mon, 31 Oct 2011 17:09:05 GMT (78kb)

[v3] Sat, 17 Dec 2011 02:29:33 GMT (57kb)

Which authors of this paper are endorsers?