

Item: 1 of 1 | [Return to headlines](#)[MSN-Support](#) | [Help](#)Select alternative format: [BibTeX](#) | [ASCII](#)

MR1994803 (2004d:32045)**[Mendes, Luís Gustavo](#) (BR-UFRS-IM); [Sad, Paulo](#) (BR-IMPA)****On dicritical foliations and Halphen pencils. (English summary)***Ann. Sc. Norm. Super. Pisa Cl. Sci. (5)* **1** (2002), *no. 1*, 93–109.[32S65 \(37F75\)](#)[Journal](#)[Article](#)[Doc
Delivery](#)

[References: 38](#)**Reference Citations: 0****Review Citations: 0**

Summary: “The aim of the paper is to provide information on the number and on the geometrical position of singularities of holomorphic foliations of the projective plane. As an application, it is shown that certain foliations are in fact Halphen pencils of elliptic curves. The results follow from Miyaoka’s semipositivity theorem, combined with recent developments on the birational geometry of foliations.”

Reviewed by [Pedro Fortuny Ayuso](#)

[References]

Note: This list reflects references listed in the original paper as accurately as possible with no attempt to correct errors.

1. P. Baum - R. Bott, *On the zeroes of meromorphic vector fields*, Essays on Topology and Related Topics (Mémoires dédiés à Georges De Rham), Springer, New York (1970), 29–74. [MR0261635 \(41 #6248\)](#)
2. W. Barth - C. Peters - A. Van de Ven, “Compact complex surfaces”, Springer-Verlag, 1984. [MR0749574 \(86c:32026\)](#)
3. M. Brunella, *Feuilletages holomorphes sur les surfaces complexes compactes*, Ann. Sci. École Norm. Sup. **30** (1997), 569–594. [MR1474805 \(98i:32051\)](#)
4. M. Brunella, *Birational geometry of foliations*, First Latin-American Congress of Mathematicians, IMPA, Brazil, 2000. [MR1948251 \(2004g:14018\)](#)
5. F. Cossec - I. Dolgachev, “Enriques surfaces I”, Progress in Mathematics 76, Birkhauser, 1989. [MR0986969 \(90h:14052\)](#)

6. R. Friedman - J. Morgan, "Smooth Four-Manifolds and Complex Surfaces", Springer-Verlag, 1994. [MR1288304 \(95m:57046\)](#)
7. X. Gomez-Mont - J. Seade - A. Verjovsky, *The index of a holomorphic flow with an isolated singularity*, Math. Ann. **291** (1991), 737–751. [MR1135541 \(93d:32066\)](#)
8. M. Klughertz, *Existence d'une intégrale première méromorphe pour des germes de feuilletages à feuilles fermées du plan complexe*, Topology **31** (1992), 255–269. [MR1167168 \(93i:32036\)](#)
9. A. Lins Neto, *Some examples for the Poincaré and Painlevé problems*, to appear in Ann. Sc. Ec. Norm. Sup., 2001. cf. [MR 2003j:34009](#)
10. J. F. Mattei - R. Moussu, *Holonomie et intégrales premières*, Ann. Sci. École Norm. Sup. **13** (1980), 469–523. [MR0608290 \(83b:58005\)](#)
11. M. McQuillan, *Diophantine approximations and foliations*, Inst. Hautes Études Sci. Publ. Math. **87** (1998), 121–174. [MR1659270 \(99m:32028\)](#)
12. M. McQuillan, *Non-commutative Mori theory*, preprint IHES 2000.
13. L. G. Mendes, *Kodaira dimension of holomorphic singular foliations*, Bull. Braz. Math. Soc. **31–2** (2000), 127–143. [MR1785264 \(2001i:14015\)](#)
14. R. Miranda, "The basic theory of elliptic surfaces", ETS Editrice, 1989. [MR1078016 \(92e:14032\)](#)
15. Y. Miyaoka, *Theme and variations - Inequalities between Chern numbers*, Sugaku Expositions **4** (1991), 154–176. [MR1139548](#)
16. H. Poincaré, *Sur l'intégration algébrique des équations différentielles du 1er ordre et du 1er degré*, Rend. Circ. Mat. Palermo **5** (1891), 161–191.
17. P. Sad, *Regular foliations along curves*, Ann. Fac. Sci. Toulouse **8** (1999), 661–675. [MR1815160 \(2002b:32052\)](#)
18. A. Seidenberg, *Reduction of singularities of the differentiable equation $A dx = B dy$* , Amer. J. Math. **90** (1968), 248–269. [MR0220710 \(36 #3762\)](#)
19. M. Suzuki, "Sur les intégrales premières de certains feuilletages analytiques complexes", Springer Lecture Notes in Math. 670, 53–79. [MR0521913 \(80h:57038\)](#)

© Copyright American Mathematical Society 2004, 2005