Differentiable invariants of holomorphic foliations

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In this talk we study differentiable equivalences of germs of singular holomorphic foliations in dimension two. We prove that the Camacho-Sad indices are invariant by such equivalences. We also prove that the Baum-Bott index is a differentiable invariant for some classes of foliations. As a corollary we show that generic degree two holomorphic foliations of $\mathbb{P}^2$ are differentiably rigid.