

# FACETS OF KÄHLER-HERMITIAN SURFACES

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## Resumo/Abstract:

I'll discuss a class of Hermitian surfaces (compact or not) with invariant Ricci tensor, many of which arise by deformations of Kähler surfaces of Calabi type.

Their classification remarkably ties in with the theory of Abelian vortices, affine spheres and Lagrangian immersions in projective space.

## References

- [1] S.G.CHIOSSI, P.-A.NAGY, *Systems of symplectic forms on four-manifolds*, Ann. Sc. Norm. Sup. Pisa Cl. Sci. (5) vol XII (2013), 717-734
- [2] S.G.CHIOSSI, P.-A.NAGY, *Complex homothetic foliations on Kähler manifolds*, Bull. London Math. Soc., 44 (2012), 113-124