

## ON PURELY REAL SURFACES IN KAEHLER SURFACES AND LORENZ SURFACES IN LORENZIAN KAEHLER SURFACES

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### Abstract

An immersion  $\phi: M \rightarrow \tilde{M}$  of a manifold  $M$  into an indefinite Kaehler manifold  $\tilde{M}$  is called purely real if the almost complex structure  $J$  on  $\tilde{M}$  carries the tangent bundle of  $M$  into a transversal bundle. In this article we survey some recent results on purely real surfaces in Kaehler surfaces as well as on Lorentz surfaces in Lorentzian Kaehler surfaces.

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