## Proper J-holomorphic disks in Stein domains of dimension 2

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## Abstract:

The problem of embedding complex disks or general Riemann surfaces into complex manifolds has been well-known for a long time. The interest to the case of almost complex manifolds has recently grown due to a strong link with symplectic geometry. We present the following result. Let (M,J) be an almost complex manifold of complex dimension 2 and let G be a smooth domain in M defined by a global strictly plurisubharmonic function. Then there exists a proper J-holomorphic disc passing through a given point in given direction.