

# LOCAL FORMS FOR BRANES IN GENERALIZED COMPLEX 4 MANIFOLDS

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Branes in a generic generalized complex 4- manifold can be either points in the complex locus, Lagrangians intersecting the complex locus at a few points and the complex locus itself. A neighborhood of each such brane is determined by data on the brane. Some of these neighborhoods resemble a neighborhood of a Lagrangian manifold in a symplectic manifold while other are related to complex submanifolds and holomorphic Poisson structures. We will present the neighborhood theorem and, if time allows, will give applications of such theorems.

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