

“FOLIATIONS AND GROUPOIDS”

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A regular foliation is a partition of a manifold into immersed connected submanifolds called “leaves” satisfying certain properties. Some examples of foliations are given by Lie group actions, but in general, every foliation has a group-like structure associated to it called groupoid. One special groupoid is the holonomy groupoid which has a smooth structure and is minimal in some sense. Through this groupoid, it is possible to study the space of leaves which is not always a smooth manifold, look at algebraic properties of the foliation and recover all the information.