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# HOLONOMY GROUPOID AND $C^*$ -ALGEBRA OF A SINGULAR FOLIATION AND APPLICATIONS

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## Abstract

We explain the construction of the holonomy groupoid and the  $C^*$ -algebra of a foliation. We will start with the regular case and then explain how these constructions extend to the general, even very singular case.

These constructions allow to develop an associated pseudodifferential calculus and index theory. We will also explain how they can be used to get informations on some “partially elliptic” differential operators on a manifold (based on joint work with I. Androulidakis).

**Date :** Friday, October 4, 2013

**Time:** 11:00

**Place:** IMBM Seminar Room, Boğaziçi University South Campus