INTEGRATING LIE ALGEBROIDS TO LIE GRUPOIDS

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Abstract

I will report on some recent joint work with Marius Crainic (Utrecht), where we give the obstructions for integrating Lie algebroids to Lie grupoids [2]. This puts into a new perspective the work of Cattaneo and Felder [1] for the special case of Poisson manifolds and the "new" proof of Lie's third theorem given by Duistermaat and Kolk in [3].

References

[1] A. Cattaneo and G. Felder, *Poisson sigma models and symplectic groupoids*, math.DG/0003023

[2] M. Crainic and R. L. Fernandes, *Integrating Lie algebroids to Lie groupoids*, in preparation (it will be available in xxx by the time of the meeting)

[3] J. Duistermaat and J. Kolk, *Lie groups*, Springer University text, 1999.

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