On linear Rough Differential Equations

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Linear Rough Differential Equations have specific properties with respect to Rough Differential Equations (RDE). In particular, they are related to multiplicative functionals and also to derivatives of solutions of RDE. They have unique, global solutions. As such, this object deserves to be studied for its own properties, while the theory of RDE was initially developed to deal with non-linear equations. Prof. Aida set up the first study of linear rough differential equations. In this talk, we then summarize the main results on this topic.

Form a joint work with Laure Coutin (Univ. Toulouse III, France).