

Title: Free integro-differential algebras

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Abstract: Integro-differential algebras have been introduced recently in the study of boundary problems of differential equations. We discuss two recent constructions of free commutative integro-differential algebras. They are based on the construction of free commutative Rota-Baxter algebras by mixable shuffles. The first construction is by evaluations. The second one is by the method of Groebner-Shirshov bases.

[This talk was presented as a substitute for the scheduled talk by Wei Li, who was not able to attend.]