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Differential fields with free operators

Over the last couple of years, Tom Scanlon and I have developed the model theory of fields equipped with what we called "free operators"; a very general framework that includes derivations and endomorphisms as particular cases. The formalism allows for the consideration of several free operators at once, so for example difference-differential fields, but the model companion was only proved to exist for the theory that imposes no functional equations among the operators. In particular, the theory can not ask the operators to commute. In general this is necessary (a pair of commuting endomorphisms has no model companion) but in many cases of interest it is not. In this talk I will discuss recent joint work with Omar Leon Sanchez that considers the theory of fields equipped with several commuting derivations plus free operators that commute with the derivations.