1056-13-839 **Thomas Scanlon*** (scanlon@math.berkeley.edu), University of California, Berkeley, Department of Mathematics, Berkeley, CA 94720-3840. *Infinitesimal differential Galois groups from jet spaces.*

In joint work with Rahim Moosa, I developed a theory of jet spaces of generalized Hasse differential varieties. In this talk, I will explain how these jet spaces give a precise sense to higher order linearization of general systems of difference/differential equations and how one may thereby associate infinitesimal Galois groups to such systems. (Received September 17, 2009)