

1116-34-1294 **Anand Pillay*** (apillay@nd.edu), Department of Mathematics, University of Notre Dame,
Notre Dame, IN 46556. *Differential Galois extensions.*

This is a report on joint work with Moshe Kamensky. Given a differential field K with field of constants C_K , and a linear DE (more generally “logarithmic DE”) over K , we give sufficient conditions on C_K for the existence of a Picard-Vessiot (strongly normal) extension L of K for the equation such that C_K is existentially closed in L (as fields). Our results subsume those of Crespo, Hajto and van der Put, among others. (Received September 18, 2015)