1026-22-81 **Elie Compoint**, Cit Scientifique, UFR de mathmatiques, 59655 Villeneuve d'Ascq, France, and **Anne Duval*** (`duval@math.univ-lille1.fr`), Cit Scientifique, UFR de mathmatiques, 59655 Villeneuve d'Ascq, France. *Local differential galois group and adjoint representation.*

We construct a (generally) maximal torus containing the exponential torus and develop an algorithm to reduce the weight subspaces of dimension higher than 1 to root subspaces. We also study the regularity of the exponential torus in the local differential Galois group. (Received February 15, 2007)