

# Generic 2–step bracket generating distributions

Chiara De Zanet

Smooth distributions on smooth manifolds are among the main objects studied in differential geometry. Informations about the intrinsic structure of a given distribution  $H \subset TM$  can be useful to find its group of automorphisms, which is an interesting problem from both points of view of past and current research. As a first step in this direction, one can fix a point and look at the behaviour of the bracket among sections of  $H$  in that point. One can translate this step in terms of linear algebra and of actions of the general linear group. In the case of 2–step bracket generating distributions, one can focus on an action which is simpler than in the general case.