1011-58-31 **Peter J. Olver*** (olver@math.umn.edu), School of Mathematics, University of Minnesota, Minneapolis, MN 55455. *Moving Frames for Lie Pseudo-groups.*

New computational methods for handling infinite-dimensional Lie pseudo-group actions, with an emphasis on those arising as symmetry groups of differential equations, are based on a generalization of the method of equivariant moving frames. Algorithms for direct determination of the structure of symmetry groups and of their algebras of differential invariants will be presented. (Received July 15, 2005)