1030-37-131 **David M McClendon*** (`dmm@math.northwestern.edu`), Department of Mathematics, 2033 Sheridan Road, Evanston, IL 60208-2370. *An Ambrose-Kakutani theorem for Borel semiflows.* Preliminary report.

In the 1940s Ambrose and Kakutani showed that any measurable, measure-preserving flow on a standard probability space is isomorphic to a "flow under a function". In this talk, we examine which bimeasurable, measure-preserving semiflows on a standard Polish space are isomorphic to a "semiflow under a function". In particular, we give two conditions which taken together are necessary and sufficient to guarantee such an isomorphism. Furthermore, we will discuss partial results relating to a conjecture about semiflows analogous to the Becker-Kechris theorem for Polish group actions. (Received July 28, 2007)

1