

# H. Becker and A. S. Kechris: The Descriptive Set Theory of Polish Group Actions; Corrections and Updates (February 17, 2010)

**Page 16, 2.2.7:** Jan van Mill pointed out an error in the proof of this theorem and provided a modification that corrects it in his paper: Analytic groups and pushing small sets apart, Trans. Amer. Math. Soc., 361 (2009), 5417–5434; Appendix 1.

**Page 17, 2.2.8:** The answer to this problem is negative; see L. Ding and S. Gao, On generalizations of Lavrentieff’s theorem for Polish group actions, Trans. Amer. Math. Soc., 359 (2007), 417–426.

**Page 38, line 6-:** Add ”symmetric” before ”nowhere dense”.

**Page 43, 3.5.4** The answer is negative, see H. Friedman and L. Stanley [89] and G. Hjorth, *Classification and Orbit Equivalence Relations*, Math. Surveys and Monographs, **75**, Amer. Math. Soc., 2000, 3.4.2.

**Page 92, 6.2.5:** Add space after ”TVC”.

**Page 98:** In 7.1.2 add:

(iv) There is a Borel function  $g : X^2 \rightarrow G$  such that  $xE_ay \Rightarrow g(x, y) \cdot x = y$ .

**Page 121, 8.2.4** The answer is negative, see H. Friedman and L. Stanley [89] and G. Hjorth, *Classification and Orbit Equivalence Relations*, Math. Surveys and Monographs, **75**, Amer. Math. Soc., 2000, 3.4.2.

**Page 133:** ”Federov” should be ”Fedorov”