Generalized Parking Problems

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Abstract. Starting from a well known exercise in Chow–Robbins–Siegmund (1971, p. 45 and 60) on finding a parking spot, we develop a method, which generalizes the main idea of the exercise to more general stopping problems. We shall focus mainly on two types of situations:

a) when the observations are discrete in time,

b) when an additional error term shows up which makes the calculation of an exact solution impossible (also by free boundary methods).

This talk can be considered as a continuation of my lecture given at the Manchester meeting on optimal stopping in 2006. See e.g. Lerche and Urusov, Optimal stopping via measure transformation: The Beibel–Lerche approach, *Stochastics* 79 (2007) 275–291.

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