Applications Of Empirical Process Theory

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Remark: In the statement of Donsker’s theorem I have ignored measurability difficulties related to the fact that $\mathcal{D}(\mathbb{R}, \mathbb{R}^\infty)$ is a nonseparable Banach space. For the most part (the exception is in Sections 1.2 and 1.3), I will continue to ignore these difficulties throughout these lecture notes. For a complete treatment of the.

Our main focus in the second half of these lectures will be on applications of these results to problems in statistics. Thus we briefly consider several examples in which the utility of the generality of the general theory becomes apparent. Examples A commonly recurring theme in statistics is that we want to prove consistency or asymptotic normality.