Data–dependent parameter choice for a conditional kernel density estimate.

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We present a method to choose the parameters of a conditional kernel density estimate. This method is based on the combinatorial method for choosing the parameters of a density estimate. In contrast to most literature we consider conditional density estimation in L_1. We derive a theoretical result about the quality of the proposed method and illustrate the performance of the estimate for finite sample size by using simulated data.

Keywords: Conditional density estimation; L_1–error; bandwidth selection.