

國立臺北大學統計學系

專題演講

講 題：On the model checking for the single-index model

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時 間：107 年 12 月 5 日 (星期三，13：10~15：00)

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Abstract

The single-index model is a popular semiparametric model. It has the flexibility as nonparametric regression does and avoids the curse of dimensionality. It has been widely used and only a few diagnostic tools are available for model checking. Most of the existent methods are based on deleted residuals, bootstrapping samples or martingale transforms to make the test being asymptotically distribution free (ADF). In this talk, we propose another approach that computes the bias directly and then amends the test statistics to have ADF property. The construction of the test statistics is straightforward. It requires no bootstrapping or deleted residuals. Our test could be preferable regarding the performance of power through a simulation study.

~~ 歡迎參加 ~~

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