CMSTatistics 2021

Virtual tutorial 1: Friday December 17th, 2021 – 9:00-13:30

Model selection and inference after model selection

Prof. Gerda Claeskens, KU Leuven, Belgium.

9:00 - 10:00	**Part 1** Introduction to variable selection - The classics.
	- AIC and AIC-like criteria
	- BIC and BIC-like criteria
	- Derivation and explanations
	- Properties
10:00- 10:15	Break
10:15 - 11:00	**Part 2** Other models and other methods
	- Model selection in mixed models
	- FIC for focused selection
11:00 - 11:30	Break
11:30 - 12:15	**Part 3**
	- Cross-validation
	- Regularized estimation and selection - two in one
	- Consequences of selection on further inference
12:15 - 12:30	Break
12:30 - 13:30	**Part 4** Inference using a selected model
	- Valid inference after model selection
	- Selective inference after model selection