Title: Some issues in Statistical Modelling

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The short course covers an introduction to three relevant topics in statistical modelling, namely: missing data, measurement error and quantile regression.
In detail the course will be structured as follows:

1.   Introduction to missing data
- Taxonomy of missing data mechanisms
- Weighting, imputation and other approaches
- Implementation and Case Studies in R

2.   Introduction to measurement error
- Models for Measurement Error
- Measurement Error in regression models
- Implementation and Case Studies in R

3.   Quantile regression
- Fundamentals on quantile regression
- Inference for quantile regression
- Implementation and Case Studies in R

Students are expected to write a short paper one one or more topics listed above and make a short presentation to the class.