



Seminários do LEG

## **A brief introduction to GAMLSS**

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In all fields of science and technology the amount of data are growing rapidly. Analysing them can be more challenging than ever and hence powerful models should be used. In this sense, Rigby and Stasinopoulos (2005) proposed the generalised additive models for location, scale and shape (GAMLSS). GAMLSS are really flexible semi-parametric regression models that involve a distribution for the response variable (that does not necessarily belongs to the exponential family) and may involve parametric linear and/or non-parametric smoothing terms when modelling any or all of the parameters of the distribution as functions of explanatory variables. This talk will be a basic exposition about the GAMLSS models and how it can be applied in real life examples, using the R package.

**Palavras-chave:** Generalized Additive Models, GAMLSS.