

SEMINÁRIOS
SÉRIES TEMPORAIS, ONDALETAS E DADOS
FUNCIONAIS

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TIME-VARYING EFFECTS IN SEMIPARAMETRIC SURVIVAL MODELS USING
HAAR WAVELETS

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The semi-parametric Cox model is often considered in the modeling of survival data. It is a very flexible model, allowing for the evaluation of covariate effects. One of its main advantages is the easy of interpretation, as long as the rate of hazards for two individuals does not vary over time. However, this proportionality of the hazards may not be true in some situations and, in this case, an approach that does not rely on such assumption is needed. In this talk we propose a Cox-type model that allows for time-varying covariate effects based wavelets on a time-frequency representation. Simulations and an application to a real data set suggest that our method may be a valuable tool to model practical situations where covariate effects vary over time in survival analysis.

(trabalho conjunto com Antonio Carlos Pedroso de Lima, Airlane
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