# UNIVERSIDADE DE ÉVORA
## ESCOLA DE CIÊNCIAS E TECNOLOGIA
### DEPARTAMENTO DE MATEMÁTICA

**Centro de Investigação em Matemática e Aplicações**
**Departamento de Matemática**
**Programa de Doutoramento em Matemática**

## Seminar

**28/02/2024**, Online, 14h30
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# Multiplicative and additive shared frailty models for gap time data

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**Abstract:** Assessing the impact of unobserved heterogeneity is important in the analysis of gap times between recurrent events. Shared frailty models are particularly useful in this context to account for the within-subject dependence among event times. Usually, such models rely on the assumption that frailty acts multiplicatively on the hazard/rate function but, in certain scenarios, it may be more realistic for frailty to be included in an additive way. Furthermore, the unobserved heterogeneity may be due to the presence of some subjects who are non-susceptible to the event of interest, and others with a varying degree of susceptibility.

The aim of this talk is to present some recent contributions in recurrent event analysis, namely parametric gap time models with a multiplicative or an additive shared frailty.

**Keywords:** Frailty, gap times, recurrent events, survival analysis.