ALPEN-ADRIA UNIVERSITÄT KLAGENFURT

INVITATION TO THE DOCTORAL SEMINAR

Dipl. Ing. BS.c. Lukas Sommeregger
Universität Klagenfurt

"A Stochastic Drift Model for Discrete Parameters in Semiconductor Devices"

N.2.35 Wednesday, 23 November 2022 10:00 a.m.

Abstract
In this talk, we will discuss the modelling of lifetime behavior in semiconductor devices on the basis of highly-censored longitudinal stress test data. We will further tackle the issue of guard banding parameters to conform to desired quality targets and the calculation of residual useful lifetimes. Our model approach for discrete drift data is a Markov transition model based on semi-parametric estimation of increment distributions. In the context of residual useful life, quantile and expectile regression methods will be discussed. Finally, as a comparative continuous model, we will present a modelling approach using vine copulas.

Jürgen Pilz and the Department of Statistics look forward to seeing you at the talk!