

SEMINÁRIOS
SÉRIES TEMPORAIS, ONDALETAS E DADOS
FUNCIONAIS

LOCAL: IME, USP, Auditório A. Gilioli, Sala 247, Bloco A

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HORÁRIO: 16h00

INCREASING THE DIMENSIONALITY: FROM DYNAMIC VINE TO DYNAMIC
FACTOR COPULAS

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1st Part: Vine copulas constitute a very flexible class of multivariate dependence models. Built on bivariate copulas, they can match any possible dependence structure. We propose an approach that allows the dependence parameters of the pair-copulas in a D-vine decomposition to be potentially timevarying, As an illustration, we estimate the Value at Risk,

2nd Part: We estimate risk measures, such as Value at Risk (VaR) and Expected Shortfall (ES) for large dimensional portfolios via copula modelling. For that we compare several high dimensional copula models, from naive ones to complex factor copulas, which are able to tackle the curse of dimensionality whereas simultaneously introducing a high level of complexity into the model.