

NMST611 *Advanced Statistics Seminar*

## Statistical modelling for and with copulas

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### **Abstract**

Copulas are useful instruments for modelling statistical dependence. While flexible, their use comes with challenges related to selection and computation. I will discuss inferential procedures for copula structures, emphasizing the conditional copula setup, as well as their embedding in well-established statistical models such as those used in imputation for survey sampling or in state decoding for hidden Markov models. I will illustrate the methodology using data analyses and numerical experiments.