

**Title:** *Doubly robust estimation of the average treatment effect among the treated when the treatment is multivalued*

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**Time:** 13.00–14.00

**Place:** UB337

### **Abstract**

We consider a situation where the average treatment effect among the treated (ATT) is a parameter of interest and where the treatment is multi-valued. The ATT can be estimated using outcome regression or using inverse probability weighting. It is also possible to construct a doubly robust estimator of the ATT using weighted ordinary least square, thus combining outcome regression with inverse probability weighting. The estimators are defined in the framework of partial M-estimation and we derive analytical expressions of the estimator and the asymptotic variance. We assess the finite sample properties in a simulation study.

This is a joint work with Ingeborg Waernbaum, Departemnt of Statistics, Umeå University