Estimating diffusion and adoption parameters in networks

New estimation approaches for the latent-diffusion-observed-adoption model

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This thesis investigates parameter estimation in a widely applicable model of interaction in social networks. The econometric challenge arises from the fact that this interaction is not fully observable. Three distinct estimation methods are proposed to tackle this problem. The properties of the estimators are investigated by means of analytical considerations and Monte Carlo experiments. Furthermore, the estimators are applied to a concrete setting using publicly available data.
Recent years have seen an increase in the availability of data on social networks and the various activities mediated through them. This has generated a need for econometricians to develop or adjust estimation methods to fit the particular requirements of social network models. This thesis hopes to make a contribution to this new strand of research.

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