Rui Midterm Meeting

Discussed Our Honest Opinions of the Thesis. Both as candate and honest as possible, best results.

First: How did I (Martin) experience the feedback so far?

Is good. Clear, structure is a bit lacking.

Am I on schedule? Difficult to say, everyone is different.

The problem is now too broad.

The amount of effort put in is good, but it should be more focused, more narrow. We have some methodologies, but we should be more concrete in the problem itself. Example: Regularization, tuning of hyperparameters, threshold, residual error, gain, number of edges, bootstrapping, cross-validation.

How to proceed: Some guarantees about OMP, or other methods, for either time series of SEM. SEM might be easier, iid data, and the dependencies of time series make things quite horrible.

Other way, does high dimensionality and constraints yield enough information to find the correct directions? For higher dimensions, does OMP perform better?

Example from LASSO: regularization parameter should be of order log(k / p^2). Something also for OMP, not that we have DAG-ness?

LASSO, pick penalty weight of log(k / p^2), then probability of correctly finding converges to 1.