# Seminar

## Two topics I would be interested in:

- Biodiversity losses in future societies: land use vs climate change driven impacts on ecosystems (+ modelling approaches for that)
- Coupling of IAMs with supply and use tables (SUTs) and/or input-output tables (IOTs); uni- and/or bidirectional

# Project

Not sure if focus on capital stocks or on linking in general…

## Representation of capital stocks in IO-IAM linkage

0. Conceptualisation: How could IAMs be coupled with IOTs/SUTs?
   → decision if work with IOTs or SUTs
1. Aggregation of IOTs/SUTs to desired country/sector resolution (country aggregation only necessary if multiregional (MR) setting; e.g. 2 region – 10 sector economies)
2. Finding linkages (→ replacement!) of IAM commodities + capital in IOTs/SUTs (only for ZA if MR-case)
3. Representation of IOT/SUT balances (in=out, supply=demand) as constraints in GAMS (perhaps as a rectangular choice model)

# Project (cont'd)

## Representation of capital stocks in IO-IAM linkage

4. Exogenous trajectory definition of extra-IAM flows, i.e. remaining IOT/SUT commodities/industries/final demand (in GAMS)
5. Embedding of above variables/parameters in t0 in spreadsheet
6. Run model for t time periods
7. Analyse results + potentially perform Leontief calculus