

Thesis ideas:

1. Working title: An Application of contract theory to renewable resources.

Idea: Voluntary contracts between users and managers are used for a lot of renewable resources (for example forest, fisheries and groundwater). However, there exist very few applications of contract theory to renewable resource use. In this project a specific renewable resource is selected and contract theory is used to analyze extraction of this resource.

2. Working title: Calculating optimal total quotas for fisheries by using feed-back rules.

Idea: Because fisheries are a renewable resource a theoretical consistent optimal total quota requires information about all future values of the fish stock. However, as an approximation it has been suggested to calculate the quota by only using last period's observation for the fish stock and this is labelled a feed-back rule. In this project a feed-back rule is used to empirically quantify a total quota for an actual fishery.

Research interest: Regulation, Renewable resource extraction, Asymmetric information, Contract theory, Principal-agent theory