# ECON4925 Resource economics, fall 2011

**Lecture note 7, Michael Hoel**

**Non-renewable resources: Basic principles**

Optimal resource extraction

* Control theory (see LN 1B)
* Intuition and figures

The market outcome

* Coincides with social optimum under ideal conditions
* What can go wrong?

How does the optimal extraction path depend on

* The resource stock
* The discount rate
* The demand function

Extraction costs

* Constant unit costs
* Unit costs depend on time
* Unit costs depend on accumulated extraction (lecture 8)