# An Introduction to Continuous Time and Stopping Problems

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Topics in Economic Theory

# Motivation

**Time as a *decision variable*.**

- When to sell an asset (house, car, stock).
- Deciding if/when to call a snap election.
- If/when to adopt a new technology.
- Response times: behavioral data that comes for free; what to make of it?

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- Learning about new product, new technology, market conditions, etc.
- Strategic situations: preemption — e.g. improve product vs file patent first/post paper first, waiting for price to increase vs sell first, etc.

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**Learning by doing.**

- Experimenting with products, interest rate adjustment, testing platform interface designs, etc.

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