

Questions for Lecture 9

While reading *Chapter 3* of [HRSW], ask yourself:

- Why do we work in abstract Hilbert spaces instead of pointwise in space?
- What is the idea of a Gelfand triple (3.6)?
- What is the idea of a variational formulation? What do we gain? What type of solutions do we obtain?
- How do we get from the abstract variational formulation to actual computations?
- How fast does the finite element method converge? What does it require?