

## Protocol Lecture 11.02

### *Parseval relation*

- Remind: relation for functions in  $L^1$
- Proof of the Parseval relation
- Resume: How one understands the Fourier transform in  $L^2$
- Properties of Fourier transform

### *Sampling of bandlimited functions*

- Definition of bandlimited functions
- Sampling theorem
- Proof
- Nyquist density

The content of this lecture can be found (mainly) in Lessons 18 (Exercise), 22, and later 38 of the textbook.