Core Topics

Functional Analysis 18.102

- Finite-dimensional vs co-dimensional space
- Normed spaces - Banach spaces
- Continuity - Bounded
- Quotient spaces
- Uniform boundedness principle
- Open Mapping Theorem - Closed graph theorem
- Hahn-Banach Theorem - H-K Z-representation theorem
- Adjoints
- Self-adjoint operators
- Spectrum of operators
  - Pure point spectrum
  - Continuous spectrum
  - Point embedded in the continuum

- Double Dual
- Absolutely summable series
- General Staff
- About Measure
  - Theory