

MATH 402

Hilbert Space Techniques

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Prerequisites: Elementary Analysis , Metric Spaces, Linear Algebra

Topics to be covered:

- Brief review of convergence in function spaces.
- Introduction to normed linear spaces.
- Basic theory of Hilbert spaces: orthogonality, projections, duality, expansions, self- adjoint operators, compact linear operators.
- Selected Applications.

Text Book: No particular text-book will be used

Sources:

N. Young , An introduction to Hilbert Spaces, Cambridge University Press
1988

Debnath and Mikusinski, Introduction to Hilbert Spaces with Applications,
Academic Press, 2005

First Meeting: Feb 12, 2013 , 8:40 , Fac. of Engin. and Nat. Sci. L058