

MA-626 APPROXIMATION THEORY

Best approximation in metric and normed spaces, Least square approximation, Rational approximation, Haar condition and best approximation in function spaces, Interpolation, Stone-Weierstrass theorem for scalar-and vector-valued functions, Spline approximation.

RECOMMENDED BOOKS:

1. E.W. Cheney., Introduction to Approximation Theory, McGraw-Hill, 1966.
2. I. Singer., Best Approximation in Normed Linear Spaces by Elements of Linear Subspaces, Springer-Verlag, 1970.
3. J.R. Rice., The Approximation of Functions I, II, Addison-Wesley, 1964.
4. R.B. Holmes., A Course on Optimization and Best Approximation, Lecture Notes in Mathematics No.257, Springer-Verlag, 1971.
5. M.D. Powell., Approximation Theory and Methods, Cambridge University Press, 1981.