CARLEMAN ESTIMATES AND UNIQUE CONTINUATION PROPERTY FOR ELLIPTIC OPERATORS IN BANACH SPACES

VELI B. SHAKHMUROV

Abstract. The unique continuation theorems for elliptic differential-operator equations in Banach-valued $L^p$-space are investigated. The operator-valued multiplier theorems and the Carleman estimates for the equations are employed to obtain these results. In applications the unique continuation theorems for anisotropic elliptic differential equations and finite or infinite systems of elliptic equations are studied.


Keywords and phrases: Carleman estimates, unique continuation, Banach-valued function spaces, differential operator equations, operator-valued Fourier multipliers, interpolation of Banach spaces.

REFERENCES


