

SECTORIAL OPERATORS WITH CONVOLUTION TERM

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Abstract. In the present paper, separability properties of convolution-differential equations with unbounded operator coefficients in Banach valued L_p spaces are investigated. A coercive estimate for resolvent of corresponding realization operator, especially, its R -sectoriality is obtained. Finally, these results applied to establish maximal regularity of Cauchy problem for the abstract parabolic convolution equations and integro-differential equations on infinite dimension state spaces.

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