THIRD ORDER OF ACCURACY SEQUENTIAL TYPE DECOMPOSITION SCHEMES FOR TWO AND MULTIDIMENSIONAL EVOLUTION PROBLEMS

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In the present work sequential type decomposition schemes of the third order of accuracy for the solution of two and multidimensional evolution problems are constructed and investigated. For the considered scheme the explicit $a\ priori$ estimations are obtained.

 $\it Key\ words\ and\ phrases$: Decomposition method, Operator split, Semigroup, Trotter formula, Cauchy abstract problem.

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