

On a heat equation in an infinite-dimensional separable Banach space with Schauder basis

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By using an infinite-dimensional "Lebesgue measure" in an infinite-dimensional separable Banach space B with Schauder basis a solution of a heat equation with initial value problem on B is constructed. Properties of uniformly distributed real-valued sequences in an interval of the real axis are used for a construction of a certain algorithm which gives to approximate corresponding solutions.