On the boundedness of solution of the parabolic differential equation with time involution

Allaberen Ashyralyev[1,2,3], Amer Ahmed[1]

[1]Department of Mathematics, Near East University, Nicosia, TRNC, Mersin 10, Turkey
[2]Peoples Friendship University Russia, Ul Miklukho Maklaya 6, Moscow 117198, Russia
[3]Institute of Mathematics and Mathematical Modeling, 050010, Almaty, Kazakhstan,
aallaberen@gmail.com
amermzory81@gmail.com

In the present paper, the initial value problem for the parabolic type involutory partial differential equation is investigated. Applying Green's function of space operator generated by the differential problem, we get formula for solution of this problem. In applications, the theorem on stability estimates for the solution of this problem is established. Furthermore, it is applied to the existence and uniqueness of bounded solution of the nonlinear problem with involution.

KEYWORDS: Hilbert space, Parabolic equation with involution; Boundedness.

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