

A semilinear non-classical pseudodifferential boundary value problem in the Sobolev spaces. [Un problème aux limites semilinaire non-classique pour des opérateurs pseudodifférentiels dans les espaces de Sobolev]

Egorov Y.V., Chuong N.M., Tuan D.A.

Lab. des Math. pour l'Indust./Phys., UMR 5640, Université Paul Sabatier, 118 Route de Narbonne, 31062 Toulouse, France; Institute of Mathematics, NCST, PO Box 631, BoHo 10000 Hanoi, Viet Nam; Fac. of Math.-Mechanics-Informatics, Hanoi National University, 334 Nguyen Trai Str., Thanh Xuan, Hanoi, Viet Nam

Abstract: We study the solvability of a semilinear non-classical pseudodifferential boundary value problem in the Sobolev spaces $H_{1,p,q}$, $1 < p < \infty$, depending on a complex parameter q . © 2003 Académie des sciences. Published by Editions scientifiques et médicales Elsevier SAS. All rights reserved.

Year: 2003

Source title: Comptes Rendus Mathématique

Volume: 337

Issue: 7

Page : 451-456

Cited by: 4

Link: Scopus Link

Correspondence Address: Egorov, Y.V.; Lab. des Math. pour l'Indust./Phys., UMR 5640, Université Paul Sabatier, 118 Route de Narbonne, 31062 Toulouse, France; email: egorov@mip.ups-tlse.fr

ISSN: 1631073X

DOI: 10.1016/j.crma.2003.08.006

Language of Original Document: French; English

Abbreviated Source Title: Comptes Rendus Mathématique

Document Type: Article

Source: Scopus

Authors with affiliations:

1. Egorov, Y.V., Lab. des Math. pour l'Indust./Phys., UMR 5640, Université Paul Sabatier, 118 Route de Narbonne, 31062 Toulouse, France
2. Chuong, N.M., Institute of Mathematics, NCST, PO Box 631, BoHo 10000 Hanoi, Viet Nam
3. Tuan, D.A., Fac. of Math.-Mechanics-Informatics, Hanoi National University, 334 Nguyen Trai Str., Thanh Xuan, Hanoi, Viet Nam

References:

1. Adams, R.A., Sobolev Spaces (1975), Academic Press Agmon, S., Douglis, A., Nirenberg, L., (1959) Comm. Pure Appl. Math., pp. 624-727

2. Agranovich, M.S., (1965) Uspekhi Mat. Nauk., 20 (5), pp. 3-120
3. Chuong, N.M., Tuan, D.A., (2002), Preprint 2002/28, Institute of Mathematics, Hanoi
Chuong, N.M., Kiet, T.T., (2003) Uspekhi Mat. Nauk., , Preprint 2003/04, Institute of Mathematics, Hanoi, (in Russian), submitted for publication
4. Deimling, K., (1985) Nonlinear Analysis, , Springer-Verlag
5. Egorov, Yu.V., Kondratiev, V.A., (1969) Mat. Sb., 78 (120), pp. 148-176. , (1)
6. Egorov, Yu.V., Chuong, N.M., (1998) Uspekhi Mat. Nauk., 53 (6), pp. 249-250. , 324
7. Egorov, Yu.V., (1967) Mat. Sb., 73, pp. 356-374
8. Kiet, T.T., (2003) Differential'nye Uravneniya, , Preprint 2003/03, Institute of Mathematics, Hanoi, (in Russian), submitted for publication
9. Treves, F., Introduction to Pseudodifferential and Fourier Integral Operators (1982), Plenum Press, New York
Trung, L.Q., (1989) Uspekhi Mat. Nauk., 44 (5), pp. 169-170