深圳北理莫斯科大学

SHENZHEN MSU-BIT UNIVERSITY

应用数学讲座

Научный Семинар по Прикладной Математике

Research Seminar on Applied Mathematics

应用数学报告(60)

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摘要 / Аннотация / Abstract:

In this report, I will point out the main disadvantage of the existing methods for solving an inverse source problem: The smoothness of the solutions is limited by the boundary condition. A Fourier extension method with a modified Tikhonov regularization is presented to overcome the limitation. Compared with previous studies, the convergence result of the new method is established under a weaker a priori assumption. Numerical experiments further verify the advantage of the method.