

Title:

Optimal recovery of solutions of the wave equation from inaccurate initial conditions

Abstract:

Optimal recovery problems of solutions of the wave equation are considered. We assume that the first N Fourier coefficients of the function defined the initial form of the string are known with some errors in L_2 and L_∞ metrics. The solution of this problem follows from a more general optimal recovery problem of linear operators from inaccurate initial data. It will be shown that an optimal recovery method uses only a part of the given information.

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