Mathematics > Numerical Analysis

Finite sections of random Jacobi operators

Marko Lindner, Steffen Roch

(Submitted on 3 Nov 2010)

This article is about a problem in the numerical analysis of random operators. We study a version of the finite section method for the approximate solution of equations $Ax=b$ in infinitely many variables, where A is a random Jacobi operator. In other words, we approximately solve infinite second order difference equations with stochastic coefficients by reducing the infinite volume case to the (large) finite volume case via a particular truncation technique. For most of the paper we consider non-selfadjoint operators A but we also comment on the self-adjoint case when simplifications occur.

Submission history

Which authors of this paper are endorsers?

Download:

- PDF
- PostScript
- Other formats

Current browse context:

math.NA
< prev | next >
new | recent | 1011

Change to browse by:

math
  math.SP

References & Citations

- NASA ADS

Bookmark(what is this?)