Qualocation for periodic pseudodifferential operators:
additional order convergence, an overview *

R.D. Grigorieff

Abstract

The aim of this note is to report on some new additional order convergence results for the qualocation method applied to periodic pseudodifferential operators using splines from $S_{r,M}^h$ as trial and from $S_{r',M}^h$ as test space. Here $S_{r,M}^h$ denotes the space of 1-periodic splines of order $r$ and knot multiplicity $M \leq r$ on an equidistant mesh with mesh-size $h$. 

*Institut für Mathematik, Technische Universität Berlin, Straße des 17. Juni 135, 10623 Berlin, Germany. Email: grigo@math.tu-berlin.de