

1. Record Nr.	UNINA9910454251903321
Titolo	Hand surgery / / edited by Richard A. Berger, Arnold-Peter C. Weiss
Pubbl/distr/stampa	Philadelphia, Pennsylvania : , : Lippincott Williams & Wilkins, , 2004 ©2004
ISBN	1-4698-7801-1
Edizione	[First edition.]
Descrizione fisica	1 online resource (1901 pages) : illustrations
Disciplina	617.5/75059
Soggetti	Hand - Surgery Hand - Wounds and injuries Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.

2. Record Nr.	UNINA9910299977103321
Autore	Marica Aurora
Titolo	Symmetric Discontinuous Galerkin Methods for 1-D Waves : Fourier Analysis, Propagation, Observability and Applications / / by Aurora Marica, Enrique Zuazua
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 2014
ISBN	1-4614-5811-0
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (114 pages) : illustrations (some color)
Collana	SpringerBriefs in Mathematics, , 2191-8198
Disciplina	530.124
Soggetti	Numerical analysis Fourier analysis Approximation theory Differential equations, Partial Algorithms Applied mathematics Engineering mathematics Numerical Analysis Fourier Analysis Approximations and Expansions Partial Differential Equations Applications of Mathematics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	1. Preliminaries -- 2. Discontinuous Galerkin approximations and main results -- 3. Bibliographical notes -- 4. Fourier analysis of the DG methods -- 5. Non-uniform observability for DG approximations of waves -- 6. Filtering mechanisms -- 7. Extensions to other numerical approximation schemes -- 8. Comments and open problems -- A technical proof -- References.
Sommario/riassunto	This work describes the propagation properties of the so-called symmetric interior penalty discontinuous Galerkin (SIPG) approximations of the 1-d wave equation. This is done by means of linear approximations on uniform meshes. First, a careful Fourier

analysis is constructed, highlighting the coexistence of two Fourier spectral branches or spectral diagrams (physical and spurious) related to the two components of the numerical solution (averages and jumps). Efficient filtering mechanisms are also developed by means of techniques previously proved to be appropriate for classical schemes like finite differences or P1-classical finite elements. In particular, the work presents a proof that the uniform observability property is recovered uniformly by considering initial data with null jumps and averages given by a bi-grid filtering algorithm. Finally, the book explains how these results can be extended to other more sophisticated conforming and non-conforming finite element methods, in particular to quadratic finite elements, local discontinuous Galerkin methods and a version of the SIPG method adding penalization on the normal derivatives of the numerical solution at the grid points. This work is the first publication to contain a rigorous analysis of the discontinuous Galerkin methods for wave control problems. It will be of interest to a range of researchers specializing in wave approximations.
