

1. Record Nr.	UNINA9910788945903321
Autore	Shukla Aaron V. <1950->
Titolo	Clinical optics primer for ophthalmic medical personnel : a guide to laws, formulae, calculations, and clinical applications / / Aaron V. Shukla
Pubbl/distr/stampa	Thorofare, New Jersey : , : SLACK Inc., , [2009] ©2009
ISBN	1-61711-222-4 1-61711-682-3
Descrizione fisica	1 online resource (273 p.)
Disciplina	612.8/4
Soggetti	Physiological optics Ophthalmic assistants
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Metric system -- Basic optical math -- Light, lasers, polarization, interference, and fluorescence -- Speed of light and refractive index -- Snell's law -- Critical angle -- Total internal reflection -- Types of lenses -- Reflection and mirrors -- Power of lenses -- Vergence equation -- Multiple lens systems -- Magnification by lenses -- Prisms and dispersion -- Power of mirrors -- Spherical lenses -- Cylindrical lenses -- Spherocylindrical lenses -- Optical cross -- Conoid of Sturm -- Optical system of the human eye -- Refracting power of a curved surface -- Accommodation -- Refractive errors -- Prentice's rule, decentration, and induced prism -- Spectacle lenses -- Contact lenses.

2. Record Nr.	UNINA9910815215003321
Autore	Muscalu Camil
Titolo	Classical and multilinear harmonic analysis . Volume 2 / / Camil Muscalu, Wilhelm Schlag [[electronic resource]]
Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2013
ISBN	1-139-61116-X 1-107-23788-2 1-139-61302-2 1-139-62232-3 1-283-94327-1 1-139-62604-3 1-139-60934-3 1-139-41039-3 1-139-61674-9
Descrizione fisica	1 online resource (xvi, 324 pages) : digital, PDF file(s)
Collana	Cambridge studies in advanced mathematics ; ; 138
Disciplina	515/.2422
Soggetti	Harmonic analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents; Preface; Acknowledgements; 1 Leibnitz rules and the generalized Korteweg-de Vries equation; 1.1 Conserved quantities; 1.2 Dispersive estimates for the linear equation; 1.3 Dispersive estimates for the nonlinear equation; 1.4 Wave packets and phase-space portraits; 1.5 The phase-space portraits of e^{2ix^2} and e^{2ix^3} ; 1.6 Asymptotics for the Airy function; Notes; Problems; 2 Classical paraproducts; 2.1 Paraproducts; 2.2 Discretized paraproducts; 2.3 Discretized Littlewood-Paley square-function operator; 2.4 Dualization of quasi-norms; 2.5 Two particular cases of Theorem 2.3 3.7 Proof of Theorem 3.1 part 2; 3.8 Multiparameter paraproducts; 3.9 Proof of Theorem 3.1; a simplification; 3.10 Proof of the generic decomposition; Notes; Problems; 4 Calder on commutators and the Cauchy integral; 4.1 History; 4.2 The first Calder on commutator; 4.3 Generalizations; 4.4 The Cauchy integral on Lipschitz curves; 4.5 Generalizations; Notes; Problems; 5 Iterated Fourier series and physical

reality; 5.1 Iterated Fourier series; 5.2 Physical reality; 5.3 Generic Lp AKNS systems for $1 < p < 2$; 5.4 Generic L2 AKNS systems; Notes; Problems; 6 The bilinear Hilbert transform
 6.1 Discretization 6.2 The particular scale-1 case of Theorem 6.5; 6.3 Trees, L2 sizes, and L2 energies; 6.4 Proof of Theorem 6.5; 6.5 Bessel-type inequalities; 6.6 Stopping-time decompositions; 6.7 Generic estimate of the trilinear BHT form; 6.8 The $1/2 < r < 2/3$ counterexample; 6.9 The bilinear Hilbert transform on polydisks; Notes; Problems; 7 Almost everywhere convergence of Fourier series; 7.1 Reduction to the continuous case; 7.2 Discrete models; 7.3 Proof of Theorem 7.2 in the scale-1 case; 7.4 Estimating a single tree; 7.5 Additional sizes and energies; 7.6 Proof of Theorem 7.2
 7.7 Estimates for Carleson energies 7.8 Stopping-time decompositions; 7.9 Generic estimate of the bilinear Carleson form; 7.10 Fefferman's counterexample; Notes; Problems; 8 Flag paraproducts; 8.1 Generic flag paraproducts; 8.2 Mollifying a product of two paraproducts; 8.3 Flag paraproducts and quadratic NLS; 8.4 Flag paraproducts and U-statistics; 8.5 Discrete operators and interpolation; 8.6 Reduction to the model operators; 8.7 Rewriting the 4-linear forms; 8.8 The new size and energy estimates; 8.9 Estimates for T_1 and T_1, l_0 near A_4 ; 8.10 Estimates for T_1^*3 and T^*31, l_0 near A_{31} and A_{32}
 8.11 Upper bounds for flag sizes

Sommario/riassunto

This two-volume text in harmonic analysis introduces a wealth of analytical results and techniques. It is largely self-contained and useful to graduates and researchers in pure and applied analysis. Numerous exercises and problems make the text suitable for self-study and the classroom alike. The first volume starts with classical one-dimensional topics: Fourier series; harmonic functions; Hilbert transform. Then the higher-dimensional Calderon-Zygmund and Littlewood-Paley theories are developed. Probabilistic methods and their applications are discussed, as are applications of harmonic analysis to partial differential equations. The volume concludes with an introduction to the Weyl calculus. The second volume goes beyond the classical to the highly contemporary and focuses on multilinear aspects of harmonic analysis: the bilinear Hilbert transform; Coifman-Meyer theory; Carleson's resolution of the Lusin conjecture; Calderon's commutators and the Cauchy integral on Lipschitz curves. The material in this volume has not previously appeared together in book form.