

1. Record Nr.	UNISA996466479703316
Titolo	Differential equations and mathematical physics : proceedings of an international conference held in Birmingham, Alabama, USA, March 3-8, 1986 // edited by Ian W. Knowles, Yoshimi Saito
Pubbl/distr/stampa	Berlin, Germany : , : Springer, , [1987] ©1987
ISBN	3-540-47983-X
Edizione	[1st ed. 1987.]
Descrizione fisica	1 online resource (XVIII, 506 p.)
Collana	Lecture Notes in Mathematics, , 0075-8434 ; ; 1285
Disciplina	515.35
Soggetti	Mathematical physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Analytical solutions for ordinary and partial differential equations -- On the ratio of the first two eigenvalues of Schrödinger operators with positive potentials -- Inverse scattering for self-adjoint nth order differential operators on the line -- On the dirichlet index conjecture -- Three-dimensional inverse scattering -- Spectral properties of Schrodinger operators with trapping potentials in the semi-classical limit -- Discrete sets of coherent states and their use in signal analysis -- Information, uncertainty and the singular value decomposition of the filtered fourier transformation -- On Schrödinger operators with von Neumann-Wigner type potentials -- Nonlinear conservative systems -- The initial value problem for the nonlinear equations for zero Mach number combustion -- Longtime solutions for a class of convection diffusion systems -- A closed form for the symbol of the resolvent parametrix of an elliptic operator -- Existence and finite-dimensionality of attractors for the Landau-Lifschitz equations -- The coulomb potential in higher dimensions -- A regularity theorem for differential equations of constant strength -- Intermittent bifurcation of vortex flows -- Remarks on the Scattering problem for nonlinear Schrödinger equations -- Asymptotics of solutions and spectra of perturbed periodic Hamiltonian systems -- Behavior of eigenfunctions and the spectrum of Schrödinger operators -- Shape resonances in quantum mechanics -- Random perturbation theory and quantum

chaos -- Path integral for a Weyl quantized relativistic Hamiltonian and the nonrelativistic limit problem -- Scattering with penetrable wall potentials -- Commutator methods and asymptotic completeness for a new class of stark effect Hamiltonians -- Asymptotics of the Titchmarsh-Weyl m -coefficient for integrable potentials, II -- On the difference between eigenvalues of Sturm-Liouville operators and the semi-classical limit -- Finite element approximation to singular minimizers, and applications to cavitation in non-linear elasticity -- On relating generalized expansions to Fourier integrals -- Link between periodic potentials and random potentials in one-dimensional Schrödinger operators -- Undressing of odd pseudodifferential operators -- Some mathematical aspects of the wavemaker theory -- Integro-differential equations associated with piecewise deterministic processes -- Ambrosetti-Prodi type results in nonlinear boundary value problems -- Transmutation of analytic and harmonic functions -- Some solved and unsolved canonical problems of diffraction theory -- Runge-Kutta schemes and numerical instabilities: The logistic equation -- Structure of positive solutions to $(\Delta + V)u = 0$ in \mathbb{R}^n -- An extension of Lavine's formula for time-delay -- Some open questions in multi-dimensional inverse problems -- Radially symmetric solutions of a Monge-Ampère equation arising in a reflector mapping problem -- Scattering theory for the wave equation on a hyperbolic manifold -- On unsteady flow in a two-dimensional cascade with in-passage shocks -- On the absorption of singularities in dissipative nonlinear equations -- Feedback control for an abstract parabolic equation -- Approximate solution of random differential equation -- Geometric properties and bounds for positive solutions of semilinear elliptic equations -- Asymptotic completeness of multiparticle scattering -- On a multi-dimensional inverse problem related to the Gel'fand-Levitan theory -- Fundamental solution of the Poisson-Boltzmann equation -- Examples of exponential decay of eigenfunctions of magnetic Schrödinger operators -- Spatially localized free vibrations of certain semilinear wave equations on \mathbb{S}^2 : Recent results and open problems.

Sommario/riassunto

The meeting in Birmingham, Alabama, provided a forum for the discussion of recent developments in the theory of ordinary and partial differential equations, both linear and non-linear, with particular reference to work relating to the equations of mathematical physics. The meeting was attended by about 250 mathematicians from 22 countries. The papers in this volume all involve new research material, with at least outline proofs; some papers also contain survey material. Topics covered include: Schrödinger theory, scattering and inverse scattering, fluid mechanics (including conservative systems and inertial manifold theory attractors), elasticity, non-linear waves, and feedback control theory.

2. Record Nr.	UNINA9911034950703321
Autore	Comas Diego Sebastián
Titolo	Advances in Bioengineering and Clinical Engineering 2025 : Proceedings of the XXV Argentinian Congress of Bioengineering (SABI 2025), the XIV Clinical Engineering Conference, and the III Latin American Conference on Clinical Engineering (CLIC), October 14-17, 2025, Mar del Plata, Argentina // edited by Diego Sebastián Comas, Gustavo Javier Meschino, Sandra Milena Pérez-Buitrago, Florencia Montini Ballarin
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
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Descrizione fisica	1 online resource (2506 pages)
Collana	IFMBE Proceedings, , 1433-9277 ; ; 136
Altri autori (Persone)	MeschinoGustavo Javier Perez-BuitragoSandra Montini BallarinFlorencia
Disciplina	610.28
Soggetti	Biomedical engineering Signal processing Biomaterials Biomedical Devices and Instrumentation Signal, Speech and Image Processing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	-- Characterization of Collagen and Hyaluronic Acid Scaffolds: Evaluation of Porosity Techniques -- Preliminary development of three dimensional-printed collagen ocular inserts with acetazolamide nanocrystals -- Surface modification of Mg ZX10 with inorganic nanoflower-like structures for biomedical application -- 3D-printed collagen and chondroitin sulfate scaffolds for tissue regeneration applications -- Model-Based Systems Engineering applied to Design and Develop of Biomaterials Devices, etc.
Sommario/riassunto	This book reports on the latest advancements in bioengineering, with a special emphasis on clinical engineering, medical technology management, and biomedical innovation. It covers topics such as biomedical sensors, medical robotics, imaging technologies, wearable health devices, and virtual health systems. Additional topics include

biomedical signal processing, rehabilitation technologies, and artificial intelligence applications in healthcare. Chapters provide a comprehensive overview of both theoretical research and experimental studies in engineering design, medical device simulation, and manufacturing processes, including both traditional machining and additive manufacturing techniques, such as 3D printing, used in the medical field. Based on the XXV Argentine Congress of Bioengineering (SABI 2025), the XIV Clinical Engineering Conference, and the III Latin American Conference on Clinical Engineering (CLIC), held from October 14-17, 2025, in Mar del Plata, Argentina, this book serves as a timely reference for both academics and professionals in the dynamic and evolving fields of bioengineering and clinical engineering.
