

EQUADIFF 6

List of papers presented at the conference

In: Jaromír Vosmanský and Miloš Zlámal (eds.): Equadiff 6, Proceedings of the International Conference on Differential Equations and Their Applications held in Brno, Czechoslovakia, Aug. 26 - 30, 1985. J. E. Purkyně University, Department of Mathematics, Brno, 1986. pp. [IX]--XVI.

Persistent URL: <http://dml.cz/dmlcz/700181>

Terms of use:

© Masaryk University, 1986

Institute of Mathematics of the Academy of Sciences of the Czech Republic provides access to digitized documents strictly for personal use. Each copy of any part of this document must contain these *Terms of use*.



This paper has been digitized, optimized for electronic delivery and stamped with digital signature within the project *DML-CZ: The Czech Digital Mathematics Library* <http://project.dml.cz>

LIST OF PAPERS PRESENTED AT THE CONFERENCE

I. PAPERS PRESENTED AS COMMUNICATIONS IN SECTIONS

A. Ordinary differential equations

- ANGELOV V.: A coincidence theorem in uniform spaces and applications
 ANGELOVA D.: Asymptotic and oscillation properties on functional - differential equations
 ANDRES J.: Higher kind periodic orbits
 AUGUSTYNOWICZ A.: On the existence of continuous solutions of operator equations in Banach spaces
 BERKOVIC L. M.: A constructive approach in the theory of differential equations: Factorization and transformations
 BIHARI I.: A second order nonlinear differential inequality
 BRESQUAR A. M.: Asymptotic solutions for the oscillatory differential equation
 BIANCHINI R. M., CONTI R.: Local and global controllability
 ČADEK M.: Pointwise transformations of linear differential equations
 DŁOTKO T.: Initial functions as controls
 DOŠLÁ Z.: Differential equations and higher monotonicity
 DOŠLÝ O.: Transformations of linear differential systems
 ELBERT A.: Eigenvalue estimations for the halfline second order differential equations
 FENYŐ I.: On the interrodifferential equation

$$x(t) + \lambda \int_0^\infty J_n(2\sqrt{tz}) (t/z)^{n/2} x^{(k)}(z) dz = F(t)$$
 FISHER A.: Almost periodic solutions of systems of linear and quasilinear differential equations with almost periodic coefficients and with time lag
 FOFANA M. S.: The stability of a special differential equation
 FOLTÝŇSKÁ I.: An oscillation of solutions of nonlinear integro-differential equations system
 GARAY B. M.: Parallelizability in Banach spaces: Examples and counterexamples
 GRAEF J. R., SPIKES P. W., ZHANG B. G.: Sufficient conditions for the oscillatory solutions of a delay differential equation to converge to zero
 GREGUŠ M.: Nontrivial solutions of a nonlinear boundary value problem
 HABETS P.: On periodic solutions of nonlinear second order differential equations
 HADDOCK J.: Phase spaces for functional differential equations
 HALICKÁ M.: Existence of regular synthesis for two classes of optimal control problems
 HATVANI L.: A generalization of the invariance principle to nonautonomous differential systems
 JAROŠ J.: Oscillation criteria for forced functional differential inequalities
 KARTÁK K.: Generalized absolutely continuous solutions of ODE
 KHEKIMOVA M.: Periodicheskie i kraevye zadachy dlya singulyarno vozmushchennykh sistem s impulsnym vozdeystvom

- KISIELEWICZ M.: Compactness and upper semicontinuity of solutions set of neutral functional - differential inclusions
- KRISZTIN T.: On the rate of decay of solutions of functional differential equations with unbounded delay
- KRUPKOVÁ O.: The inverse problem of the calculus of variations
- KULEV G., BAJNOV D.: „Prakticheskaya ustoichivost“ sistem s impul'snym vozdeistviem pri postoyano deĭstvuyushchik vozmushcheniyakh
- KÜPPER T.: Identification through forced bifurcation
- LAFORGIA A.: Turan - type inequalities for the zeros of the ultraspherical and laguerre polynomials
- LAITCHOVÁ J.: Global transformations of linear second order differential equations of a general form
- LALLI B.: Oscillatory behavior of nonlinear differential equations with deviating arguments
- MARUŠIAK P.: Oscillation theorems for nonlinear differential systems with general deviating arguments
- MAKSIMOV V. P.: O nekotorykh novykh napravleniyakh razvitiya teorii nelinejnykh uravnenii s posledestviem
- MEHRI B.: A note on existence of a periodic solution for certain non-linear second order differential equation
- MÖLLER M.: Boundary-eigenvalue problems depending nonlinearly on the parameter
- MIHALIKOVÁ B.: O koleblemosti reshenii sistem differentsial'nykh uravnenii
- MIKOLAJSKI J.: On nonoscillatory solutions of some systems of differential equations
- MIRONENKO V.: Reflective function of a system
- MOSON P.: Quasi-periodic solutions of 4-dimensional systems
- MULDOWNEY J. S.: The converse of Polyá's mean value theorem
- OMARI P.: Periodic solutions of linear equations (a joint work with F. ZANOLIN)
- PUDEI V.: Zum Problematik der Extremallösungen von linearen Differentialgleichungen n-ter Ordnung
- RONKOV A.: Linear inequalities for functions defined in partially ordered spaces
- SHKIL N. I.: About periodical solutions of systems of second order differential equations
- SCHAAF R.: Time maps and global solution branches
- SCHNEIDER K. R.: Integralmanifolds of periodic solutions of autonomous differential equations
- ŠIMŠA J.: Asymptotic integration of linear differential equations of order N under mild integral smallness conditions
- TERJÉKI J.: On the stability of solutions of functional differential equations with infinite delay
- VANDERBAUWHEDE A.: Bifurcation of subharmonic solutions in time reversible systems
- VOLKMANN P.: Un theoreme d'existence pour les equations integrales de Volterra dans les espaces de Banach
- VRDOLJAK B.: On solutions of the lagerstrom equation
- WYRWINSKA A.: Integrability of certain nonlinear differential equation with deviating arguments
- ZANOLIN F.: On a dynamical system in the Lienard plane

B. *Partial differential equations*

- BIROLI M.: Wiener obstacles for Δ^2
 BOJARSKI B.: Microlocal analysis of linear transmission problems
 DŁOTKO T.: Geometric description of quasilinear parabolic equations
 DRÁBEK P.: Destabilizing effect of certain unilateral conditions for the system of reaction-diffusion type
 DZIUK G.: A simple climate modell
 FILO J.: On a nonlinear diffusion equation with nonlinear boundary conditions: Method of lines
 FILA M.: Connecting orbits in certain reaction diffusion equations
 HEGEDŰS J.: Zadachi sopryazheniya dlya nekotorykh ellipticheskikh i giperbolicheskikh uravnenii
 HUEBER H.: Dirichlets problem for some hypoelliptic differential operators
 KAMONT Z.: Weak solutions of first order partial differential equations with a retarded argument
 KAWOHL B.: Starshaped rearrangement and applications
 KOLOMÝ J.: On accretive operators
 LEWIS R. T.: The eigenvalues of elliptic differential operators
 LORENZI A.: An inverse problem for a quasilinear parabolic equation in divergence form
 MUSTONEN V.: Topological degree of mappings of monotone type and applications
 NARAZAKI T.: Global classical solutions of semilinear evolution equation
 NAUMANN J.: Liouville property and regularity for parabolic systems
 NETUKA I.: The best harmonic approximation
 ÓTANI M.: Existence and non-existence of non-trivial solutions of some nonlinear degenerate elliptic equations
 PULTAR M.: Numerical methods of solution of hyperbolic equations
 ROTHER W.: Generalized Thomas-Fermi-von Weizsäcker equations
 SALVI R.: The equations of viscous incompressible non-homogenous fluids: On the existence and regularity
 SHOPOLOV N.: The first boundary problem of a parabolic equation with arguments reversing their roles
 SOKOLOWSKI J.: Differential stability of solutions to constrained optimization problems for p.d.e.
 SPECK F.-O.: Boundary value problems for elliptic convolution type equations
 SZULKIN A.: Minimax principles for lower semicontinuous functions and applications to elliptic boundary value problems
 ŠVEC A.: Spectrum of spheres
 TERSIAN S.: Characterizations of the range of Neumann problem for semilinear elliptic equations
 TIBA D.: Control of nonlinear hyperbolic equations
 TURO J.: A boundary value problem for quasilinear hyperbolic systems of differential-functional equations
 VERHULST F.: The Galerkin-averaging method for a nonlinear Klein-Gordon equation

C. *Numerical methods*

- AMIRALIEV G.: Towards the numerical solution of the system of Boussinesq equation

- BALLA K.: On error estimation of the approximative solution for certain singular differential equations of Riccati type
- BURDA P.: Finite element solution of a problem of potential flow
- DECHEWSKI L. T.: A method for error estimation of numerical solutions of differential equations
- ELSCHNER J.: On suboptimal convergence of finite element methods
- FRIVALDSZKY S.: Lineare und nichtlineare Mehrschrittverfahren mit variablen Koeffizienten
- FRÖHNER M.: Galerkin techniques and the method of lines applied to Burger's equation
- GUDOVICH N. N.: Ustoichivye raznostnye metody proizvoljnogo porjadka approximatitsii dlja differentsialnykh uravnenij
- HAN H.: Nonconforming finite element approximation of Navier-Stokes equations
- HEINRICH B.: On finite difference methods with fem-character for elliptic problems
- HLAVÁČEK I.: Shape optimization by the dual finite element method
- CHOW Y.-M.: Initial-value methods for computing eigenvalues of two point boundary value problem
- JOVANOVIĆ B.:
- KRETZSCHMAR H.: Stabile zweischichte Differenzenverfahren
- PIRČ V.: On the possibility of calculation of zero points of solution of second order differential equations
- PRÁGER M.: Numerical illustration of the dimension reduction method
- PROESSDORF S.: Spline approximation methods for singular integral equations
- REGIŇSKÁ T.: Superconvergence of external approximation for two-point boundary value problems
- ROOS H.-G.: Feedback grid generation via monotone discretization
- SÄNDIG A.-M.: Fem error estimates for elliptic boundary value problems in domains with conical points
- SEGETH K.: On the numerical evaluation of integrals involving Bessel functions
- STANKIEWICZ R.: Approximate methods for temporally inhomogeneous parabolic equation
- STREHMEL K.: Stability of linear implicit methods for retarded differential equations
- TAUFER J., VITÁSEK E.: Transfer of boundary conditions for two-dimensional problems
- VULCHANOV N. L.: Numerical integration of asymptotic two-point boundary value problems for ODE
- WEINER R.: Partitioned adaptive Runge-Kutta methods for the solution of stiff and nonstiff differential equations

D. Applications

- ANTES H.: Dual complementary variational principles in Reissner's plate theory
- BECKERT H.: The bending of plates and their stability region
- BOCK I.: Optimal control problems for von
- BRILLA I.: Bifurcation theory of the time dependent Karman equations
- FARKAS M.: Competitive exclusion by zip bifurcation
- JARUŠEK J.: Optimalheating of bodies with constrains on stresses
- JEDRYGA T. M.: An estimation of moment of the solution of a random operator integral equation of Volterra's type
- LAMZYUK V.: Ob odnom metode svedeniya granichnykh zadach k nachalnym i ego ispolzovaniu pri reshenii zadach matematicheskoi fiziki

- LOVÍŠEK J.: Optimal control of a variational inequality
 MARKO L.: Buckled states of circular plates
 MOSZNER Z.: On pseudo-processes and their extensions
 NEDOMA J.: Contact problem in thermoelasticity. Coercive case.
 POLCAR P., KOTOUL M.: On the numerical solution of two-dimensional stress wave propagation problem
 PETROV K.: Automodel of motion partial gaseous mixture in electric field
 RUMPEL H.: Mathematische Modelle der Fluidmechanik
 RŮŽIČKOVÁ H.: On the transport-diffusion algorithm
 SKIERCZYNSKI B.: Application of the methods of the sensitivity analysis in obtaining the solution of nonlinear differential equations
 SOBOTKA Z.: Solutions of ordinary non-homogeneous linear differential equations following from rheological models
 STĚPÁN G.: Delay of reflexes in balancing
 VRKOČ I.: Integral equations attached to skin effect

II. PAPERS PRESENTED AT THE POSTER SESSION

- BARTUZEL S.: Variational approach to certain diffusion problem
 BARVÍNEK E.: The spectral theorem for normal diagonalable operators on a real Hilbert space
 BÉDA P.: On some global properties of a predator-prey model
 ČURĀUS B.: Eigenfunction expansions associated with ordinary differential operators with an indefinite weight function
 CHERKAS L. A.: Periodicheskie resheniya avtonomnoy sistemy s fazovym prostranstvom
 DESPERAT T.: Difference methods for the solutions of differential-algebraic systems
 FARAGÓ I.: Dvykhshagovyy a-ustoichivyy metod dlya resheniya zadachi khemosorbtsii
 FARZAN R.: Zadacha rasprostraneniya elektromagnitnykh voln v sredakh o neodnorodnostyami
 GERGÓ L.: Adaptive finite element methods
 GÖPFERT A.: Approximation by solutions of elliptic equations
 GRYSA K.: On use of a certain ordinary differential equation to finding the sums of Dini series
 HOROVÁ I.: On the variational principles for Dirichlet boundary-value problem
 INVERNIZZI S.: Nonuniform nonresonance for jumping nonlinearities
 JANKOWSKI J.: Green function application to numerical solving boundary problems
 JANOVSÁ D., MAREK I.: About the monotonicity of temple quotiens
 KAFKA J.: One aspect of the discretization of Maxwell's equations
 KÁROLYI K.: Parameter estimation in problems of chemical reaction kinetics
 KHUSAINOV D.: Ispolzovanie vtorogo metoda Lyapunova optimizatsii kriteriev kachestva funktsionirovaniya dinamicheskikh sistem
 KOSTOVA T.: Qualitative behavior of the solution of a class of equations generalizing Michaelis-Menten kinetics
 KRBEČ M.: Maximal operators and imbedding theorems
 KUNCHEV O. I.: Some extremal problems for high order elliptic equations
 KUTEV N.: Fully nonlinear, nonuniformly elliptic equations
 LAPTEVSKIĬ V. N.: Ob odnom metode konstruktivnogo analiza periodicheskikh reshenii differentsialnykh uravnenii

- LIPPOLD G.: Error estimation and adaptive refinement in finite element methods
- LITIEWSKA K.: Some applications of the finite elements methods to the system of differential equations
- MEGAHED F., HAMAD G. D., SALEM Sh.: On some integral inequalities in n-independent variables
- MYJAK J.: On the set of solutions of a diff. inclusion
- NAZAROV V.: Gladkost' reshenii obyknovennogo differentsial'nogo uravneniya s otklonyayushchimsya argumentom v prostranstvakh Rum^n
- NGUEN DONG A.: Issledovanie vliyaniya razlichnykh periodicheskikh i sluchaïnykh vozbuzhdenii na sistemu Van-Der-Polya
- PAVLÍKOVÁ E.: Higher monotonicity properties of zeros of a third order differential equation
- PAVLOV V. A., NEVIDOMSKÍĀ A. I.: Reshenie matrichnogo uravneniya Rikkati ob odnoi zadache teorii optimal'nogo upravleniya
- PÄIVÄRINTA L.: The uniqueness of the one dimensional inverse problem
- PEKÁR J.: An algorithm for solving the multi-point boundary value problems for ODE
- PERINOVÁ V.: Fokker-Planck equation for free-electron laser
- PETROV I.: An inverse problem for Maxwell equations
- POPENDA J.: On the discrete generalizations of Gronwall's inequality
- RETI P.: Geometrical methods in chemical kinetics
- SCHIMMING R.: Laplace-Lie differential operators with a logarithm-free elementary solution
- TABISZ K.: Asymptotic behavior on solutions free boundary problem
- TÁBOAS P.: Periodic solutions of a forced Lotka-Volterra equation
- WAKULICZ A.: Convergence of a class of differential inclusion approximations
- WERBOWSKI J.: Asymptotic and oscillatory behavior of solutions of differential inequalities generated by retarded and advanced arguments
- ŽITNAN P.: Lower bounds for the eigenvalues of the equation $Au = Bu$ by residual defect method
- The papers of the following authors were also presented at the Poster Session:
BOGDANOV R., BOUZNASKI E., VASSILEVSKI P.

III. PAPERS PRESENTED IN THE FORM OF ENLARGED ABSTRACTS

- ANIKULAESEI G.: Optimal synthesis for a class of nonlinear control problems
- ANTONCHIK V.: Odno obobshechenie priznaka ustoïchivosti Kh. Massera dlya nepraviľnykh sistem
- ASTROVSKIĀ A. I.: Differentsial'naya upravlyaemost' lineïnykh nestatsionarnykh sistem v klasse funktsii Chebyshcheva
- BOEV T.: Uniqueness and singularities of solutions of linear operators and applications
- BORZYMOWSKI A.: A Goursat problem for a polyvibrating equation of Di Mangeron
- CHAUVEHEID P.: Green functions for some over-determined boundary value problems
- CHOCHOLATÝ P.: Finite element simulation of an axisymmetric acoustic transmission system
- KHUSAINOV D., YUNJKOVA E., IVOKHIN E., ZHUĀKOVA A.: Ispol'zovanie vtorogo metoda Lyapunova v optimizatsii kriteriev kachestva funktsirovaniya dinamicheskikh sistem
- TSEREMENSKIĀ A.: Stabilizatsiya v chastotnoi oblasti

- DIBLIK J.: On conditional stability of solutions of linear systems
- DOKTOR P.: On uniqueness periodic solution of a certain parabolic equation
- DOLEŽAL J.: New aspects of computer-aided design of dynamical systems
- FEDORENKO L.: Ob ustoičivosti reshenii stokhasticheskikh differentsialnykh uravnenii parabolicheskogo tipa
- FREILING G.: Irregular boundary value problems
- GAISHUN I. V.: Spektralnye kriterii eksponentsialnoï dikhotomii dlya uravnenii v polnykh proizvodnykh
- GONCERZEWICZ J.: On a boundary value problem with radial symmetry for the porous medium equation
- GOROKHOVIK S. YA.: Dostatochnye usloviya lokalnoï upravlyaemosti nelineinykh sistem
- GÓROWSKI J.: On the oscillatory properties of solutions of certain elliptic equation
- GRÖGER K.: Equations modeling semiconductor devices with high carrier densities
- HACIA L.: Approximate solutions of integral equations of the mixed type
- HÁČIK M.: A note to a certain property of Bessel functions
- HAVARNEANU T.: On an operatorial equation of hereditary type
- HYB W.: On the spectrum of flow on the two dimensional torus
- IGNATYEV V. N., ZADORIN A. I.: A finite difference method on nonuniform mesh for a singular perturbation problem
- INVERNIZZI G. C.: Periodic solutions of forced oscillators at resonance
- IONESCU I. R., SOFONEA M.: Existence stability and large time behaviour of the solution for a nonlinear viscoelastic problem
- KAFKA J.: One aspect of the discretization of Maxwell's equations
- KALENYUK P. I., BARANETSKIĬ YA. E.: Predstavlenie reshenii nekotorykh klassov kraevykh i nachal'nykh zadach dlya lineinykh uravnenii s chastnymi proizvodnymi
- KALININ A. I., ROMANYUK G. A.: Optimizatsiya lineinykh vozmushchennykh sistem na baze opornykh i asimptoticheskikh metodov
- KAPANADZE D.: O plotnosti elektricheskogo zaryada na poverkhnosti provodyashchego parallelepipeda
- KARLSSON T.: Wiener's criterion and obstacle problems for vector valued functions
- KLÍČ A.: Bifurcations in symmetric systems
- KOVRIGIN A. B.: Fil'tr Kalmana s vyzozhdennymi shymami v nablyudenyakh
- KUBEN J.: Time-optimal control of two-dimensional systems
- KUBIACZYK I., RZEPECKI B.: Existence theorem for ordinary differential equations
- KVEDARAS B.: Application of Laplace transformation method to the solution of a strongly degenerate elliptic equation
- KWAPISZ M.: An extension of Bielecki's method of proving of global existence and uniqueness results for functional equations
- LASKIN M. B.: Obosnovanie skhodimosti metoda Brauna dlya vypuklo-vognutykh funktsii s pomoshchyu funktsii Lyapunova
- LIZANA M.: Bounded, almost-periodic and periodic solutions of certain singularly perturbed systems with delay
- LAITTOCH M.: On central dispersions of the first kind and the theory of linear difference equations
- LUNGU N., MURESAN M.: On the number of small-amplitude limit cycles of certain systems of differential equations

- MALEC M.: Estimations of the measure of noncompactness and an existence theorem
- MERENKOV YU. N.: Kriterii ustoičivosti ura dlya funktsionaljno-differentsialnykh uravnenii
- MIRICA S.: Marginal characteristics solutions for Hamilton-Jacobi equations
- MORAVČÍK J.: Global'naya ekvivalentnost' i lineinye differentsialnye uravneniya tret'ego poryadka vse resheniya kotorykh stremyatsya k nulyu
- MORCHALO J.: Asymptotic behaviour of the solutions of differential-difference equations
- NADZIEJA T.: Shadowing lemma for family of ε -trajectories
- NAZMUTDINOV A. T., MUDARISOV I. KH.: Otsenka verkhnego chisla osovykh tochek vtoroi gruppy
- NKASHAMA M. N., IANNACCI R.: Periodic solutions of second order delay-differential systems
- OKRASIŃSKI W.: On asymptotic solutions of some nonlinear problems
- POTRA T.: Finite element of spline type for elliptic partial differential systems
- PTASHNIK B. I., BERNIK V. I.: Zadacha tipa Dirikhle dlya differentsialnykh uravnenii v chastnykh pro izvodnykh sostavnogo tipa
- RAGAB A. A., OWAILY H. EL, ZAGHROUT A. A. S.: On oscillations of nonlinear differential equations
- RASVAN V.: Stability of a integro-differential system occurring in nuclear reactor dynamics
- RIZUN V. I.: Metod vspomogatel'nykh funktsii i ego primereniya
- RUDYKH G. A.: Svoistva integralnoi krivoi neavtonomnoi sistemy differentsialnykh uravnenii
- RZEPECKI B.: On bounded solutions of a linear differential equation with a nonlinear perturbation in the case of Banach spaces
- SAMOILENKO A. M., BORISENKO A. D., BORISENKO S. D.: Limit behaviour of the solution of the Cauchy problem for parabolic equations with coefficients depending on parameter
- SIMERSKÁ C.: Generalized L-splines as a solution of n-point boundary value problem
- SIUDUT S.: Some remarks on the singular integrals on the line group
- SKOROBOGAT'KO V. YA.: Svyaz' obratnoi zadachi elektrorazvedki s mnogotochechnoi zadachei dlya obyknovennogo differentsial'nogo uravneniya
- SOSULSKI W.: Generic properties of generalized differential equations of hyperbolic type
- SPIGLER R.: Numerical treatment of certain parabolic partial differential equations
- SZMANDA B.: Oscillation of solutions of higher order difference equations
- TRYHUK V.: The contribution to a linear differential delay equation of the first order
- VASSILEVSKI P. S.: Numerical solution of Poisson's equation on regions partitioned into substructures
- VERNESCU B.: Homogenization of a transmission problem in porous media flow
- VORNICESCU N.: Existence of optimal control without convexity
- WIEGNER M.: On the asymptotic behaviour of solutions of nonlinear parabolic equations
- ZACHARIAS K., GAJEWSKI H.: On a mathematical model of polymerization by particle growth and coalescence