

Contents of Previous Volumes*

No. 1, Vol. 18 (2010)

Editorial

From the Editor-in-Chief

Research papers

David Saunders: *Some geometric aspects of the calculus of variations in several independent variables*

Yong-Xin Guo, Chang Liu and Shi-Xing Liu: *Generalized Birkhoffian realization of nonholonomic systems*

Mike Crampin: *Homogeneous systems of higher-order ordinary differential equations*

Survey paper

Olga Krupková: *Geometric mechanics on nonholonomic submanifolds*

Book review

Geoff Prince: *Classical Mechanics: Hamiltonian and Lagrangian Formalism* by Alexei Deriglazov

No. 1, Vol. 19 (2011)

Research papers

István Pink, Zsolt Rábai: *On the diophantine equation $x^2 + 5^k 17^l = y^n$*

Lorenzo Fatibene, Mauro Francaviglia: *General theory of Lie derivatives for Lorentz tensors*

Martin Swaczyna: *Several examples of nonholonomic mechanical systems*

Larry M. Bates, James M. Nester: *On D'Alembert's Principle*

*Full texts in pdf are available free on-line at <http://cm.osu.cz>.

Jing Zhang, Bingqing Ma: *Gradient estimates for a nonlinear equation $\Delta_f u + cu^{-\alpha} = 0$ on complete noncompact manifolds*

Book review

Tom Mestdag: *Geometry of Nonholonomically Constrained Systems*
by R. Cushman, H. Duistermaat and J. Śniatycki

No. 2, Vol. 19 (2011)

Geometrical aspects of variational calculus on manifolds

Guest Editor: László Kozma

Editorial

Minicourse

David J. Saunders: *Homogeneous variational problems: a minicourse*

Research papers

Lorenzo Fatibene, Mauro Francaviglia, Silvio Mercadante: *About Boundary Terms in Higher Order Theories*

Zoltán Muzsnay, Péter T. Nagy: *Tangent Lie algebras to the holonomy group of a Finsler manifold*

József Szilasi, Anna Tóth: *Conformal vector fields on Finsler manifolds*

Monika Havelková: *A geometric analysis of dynamical systems with singular Lagrangians*

Włodzimierz M. Tulczyjew: *Variational formulations I: Statics of mechanical systems.*

Book review

Jaroslav Dittrich: *Mathematical results in quantum physics edited by P. Exner*

No. 1, Vol. 20 (2012)

Guest editor: Marcella Palese

Editorial

Research papers

L. Fatibene, M. Francaviglia, S. Garruto: *Do Barbero-Immirzi connections exist in different dimensions and signatures?*

M. Francaviglia, M. Palese, E. Winterroth: *Locally variational invariant field equations and global currents: Chern-Simons theories*

Monika Havelková: *Symmetries of a dynamical system represented by singular Lagrangians*

Zoltán Muzsnay, Péter T. Nagy: *Witt algebra and the curvature of the Heisenberg group*

Olga Rossi, Jana Musilová: *On the inverse variational problem in nonholonomic mechanics*

David J. Saunders: *Projective metrizable in Finsler geometry*

Conference announcements

No. 2, Vol. 20 (2012)

Research papers

Fa-en Wu, Xin-nuan Zhao: *A New Variational Characterization Of Compact Conformally Flat 4-Manifolds*

Florian Luca: *On a problem of Bednarek*

Hemar Godinho, Diego Marques, Alain Togbe: *On the Diophantine equation $x^2 + 2^\alpha 5^\beta 17^\gamma = y^n$*

Emanuel Lopez, Alberto Molgado, Jose A. Vallejo: *The principle of stationary action in the calculus of variations*

Elisabeth Remm: *Associative and Lie deformations of Poisson algebras*

Alexandru Oană, Mircea Neagu: *Distinguished Riemann-Hamilton geometry in the polymomentum electrodynamics*

Conference announcements

No. 1, Vol. 21 (2013)

Research papers

Thomas Friedrich: *Cocalibrated G_2 -manifolds with Ricci flat characteristic connection*

Junchao Wei: *Almost Abelian rings*

Bingqing Ma, Guangyue Huang: *Eigenvalue relationships between Laplacians of constant mean curvature hypersurfaces in \mathbb{S}^{n+1}*

Johannes Schleitschitz: *Diophantine Approximation and special Liouville numbers*

Mileva Prvanović: *The conformal change of the metric of an almost Hermitian manifold applied to the antiholomorphic curvature tensor*

Conference announcements

Contents of previous Volumes

No. 2, Vol. 21 (2013)**Research papers**

Johanna Pék: *Structure equations on generalized Finsler manifolds*

Ross M. Adams, Rory Biggs, Claudiu C. Remsing: *Control Systems on the Orthogonal Group $SO(4)$*

Tadeusz Pezda: *On some issues concerning polynomial cycles*

Stephen Bruce Sontz: *A Reproducing Kernel and Toeplitz Operators in the Quantum Plane*

Serge Preston: *Supplementary balance laws for Cattaneo heat propagation*

Susil Kumar Jena: *Method of infinite ascent applied on $-(2^p \cdot A^6) + B^3 = C^2$*

Erratum**Contents of previous Volumes****No. 1, Vol. 22 (2014)****Research papers**

Satish Shukla: *Fixed point theorems of G -fuzzy contractions in fuzzy metric spaces endowed with a graph*

Xuerong Qi, Linfen Cao, Xingxiao Li: *New hyper-Kähler structures on tangent bundles*

Benjamin Cahen: *Stratonovich-Weyl correspondence for the Jacobi group*

Florian Luca, Volker Ziegler: *A note on the number of S -Diophantine quadruples*

Albo Carlos Cavaleiro: *Existence of entropy solutions for degenerate quasilinear elliptic equations in L^1*

Werner Georg Nowak: *Lower bounds for simultaneous Diophantine approximation constants*

Karl Dilcher, Larry Ericksen: *Reducibility and irreducibility of Stern $(0, 1)$ -polynomials*

Contents of previous Volumes**No. 2, Vol. 22 (2014)****Research papers**

Silvestru Sever Dragomir: *Bounds for Convex Functions of Čebyšev Functional Via Sonin's Identity with Applications*

Mikihito Hirabayashi: *A determinant formula for the relative class number of an imaginary abelian number field*

Benjamin Küster: *Discontinuity of the Fuglede-Kadison determinant on a group von Neumann algebra*

Reinhardt Euler, Luis H. Gallardo, Florian Luca: *On a binary recurrent sequence of polynomials*

Michal Čech, Jana Musilová: *Symmetries and currents in nonholonomic mechanics*

Josua Groeger: *Super Wilson Loops and Holonomy on Supermanifolds*

Contents of previous Volumes