

CENTRE OF EXCELLENCE IN MATHEMATICS

TABLE OF RESEARCH PROJECTS 2011

Institute	Research Topic	Principal Researcher	Co-researchers and Institutes
Chulalongkorn University	Continued fractions and series expansions.	Assistant Professor Dr.Tuangrat Chaichana	-
	Properties and structures of some transformation semigroups	Assistant Professor Dr. Sureeporn Chaopraknoi	-
	Authentication Process using Average Keystroke's Time.	Assistant Professor Dr.Pattarasinee Bhattarakosol	-
Kasetsart University	Diophantine Equations and Exponential Polynomials.	Dr. Kantaphon Kuhapatanakul	<p>1. Dr. Aoumporn Fagsuwan Chulalongkorn University</p> <p>2. Assistant Professor Dr. Sarachai Kongsiriwong Prince of Songkhla University</p> <p>3. Dr. Supawadee Prugsapitak Prince of Songkhla University</p>
Khon Kaen University	Algorithm for Maximal monotone operators in Banach spaces.	Associate Professor Dr. Satith Sea-jung	<p>1. Assistant Professor Dr. Hathaikarn Wattanataweekul Ubonrajathani University</p> <p>2. Assistant Professor Dr. Somchit Chotchaisthi Khon Kaen University</p> <p>3. Assistant Professor Dr. Utith Inprasit Ubonrajathani University</p> <p>4. Dr. Weerayuth nilsrakoo Ubonrajathani University</p> <p>5. Dr. Darunee Booncharae Mahasarakham University</p>
	Enhance the Quality of Mathematics Classroom based on Lesson Study and Open Approach Innovation.	Assistant Professor Dr. Maitree Inprasitha	<p>1. Dr. Narumol Inprasitha Khon Kaen University</p> <p>2. Assistant Professor Dr. Utith Inprasitha Ubonrajathani University</p> <p>3. Dr. Tipparat Nopparit Chaingmai University</p>
Chaingmai University	An application of fixed point and integration theory for differentiability of the gravitational potential fields	Dr. Worapong Fupinwong	-

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	Solving problems for nonspreading type mappings and some generalized nonexpansive mappings in Banach spaces	Dr. Warunum Inthakon	-
	The nature and Development of Mathematics Pre-service Teachers' Mathematical Knowledge for Teaching in Schools Innovated by Lesson Study and Open Approach.	Dr. Tipparat Nopparit	-
	Totally geodesic surfaces in Hyperbolic knot manifold.	Dr. Pradthana Jaipong	-
	Robust Exponential Stability of uncertain Neutral Systems with delays.	Assistant Professor Dr. Thaned Rojsiraphisal	-
	Stability and control of Dynamical Systems with Delays and Applications	Associate Professor Dr. Piyapong Niamsup	1. Dr.Thongchai Botmart Srinakharinwirot University 2. Dr. Kanit mukdasai Khon Kaen University 3. Dr.Teeranush Suebcharoen Chaingmai University
Thaksin University	Analytic solutions of a functional differential equation.	Dr. Theeradech Kuawong	-
	Mathematical Model and Numerical Technique of Granular Flow in a Silo.	Dr. Wariam Chuajan	-
King Mongkut 's University of Technology Thonburi	Meshless Local Petrov-Galerkin (MLPG) Method for Ocean Model in the Gulf of Thailand.	Assistant Professor Dr. Anirut Luadsong	-
	Third-order Central Scheme and Interpolating Moving Least Squares Reconstruction for Hyperbolic Conservation Laws	Dr. Warisa Yomsatieankul	-
	Combinatorial proofs of identities for continued fractions.	Dr. Oranit Panprasert	-
King Mongkut 's University of Technology North Bangkok	Positive Solutions of Three-point Boundary Value Problem for Difference Equation.	Associate Professor Dr. Thanin Sitthiwirattam	

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	Improvement of numerical Techniques for Solving Linear and Nonlinear Integral Equations	Dr. Khomsan Neamprem	-
Thammasat University	Parameter Estimation for Lifetime Crack Distribution.	Associate Professor Dr. Kamon Budsaba	1. Professor Dr. Andrei Volodin University of Western Australia 2. Thuntida Ngamkham Thammasat University
	Point subsets with a number of interior points.	Dr. Banyat Sroysang	-
	Numerical and Analytical Solutions of Air Flow in a Mathematical Model for Delivery in a Human Oral Airway.	Dr. Suputchara Kongnual	-
Naresuan University	Optimal system and invariant solutions on $((U_{yy}(t,s,y) - U_t(t,s,y))y - 2sU_{xy}(t,s,y))y + (S^2 + 1)U_{ss}(t,s,y) + 2sU_s = 0$	Dr. Kantima Khumrod	-
	The connective K theory of finite groups and related topics.	Dr. Kijti Rodtes	-
	Connections between order of polynomials and q-cycles over a finite field.	Dr. Ummarin Pintoptang	-
	Conditions for the solutions of fixed point problems and the systems for finding solutions of generalized equilibrium problems.	Assistant Professor Dr. Rabian Wungkeeree	1. Assistant Professor Dr. Narin Petchroj Naresuan University 2. Assistant Professor Dr. Poom Kumam King Mongkut 's University of Technology Thonburi 3. Dr. Payup Katechung King Mongkut 's University of Technology Thonburi 4. Dr. Kasamsuk Ungchitrakool Naresuan University 5. Dr. Rattanaporn Wangkeeree Naresuan University
Burapha University	Non-Uniform Bounds on Poisson Approximation with the Stein-Chen Method	Assistant Professor Kanint Teerapabolarn	-

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	Rotation-invariant holomorphic function spaces.	Dr. Areerak Chaiworn	-
	Hybrid Diffusion and Numerical Simulation for Gene Nonlinear Auto-regulation networks	Dr. Somkid Intep	-
Mahidol University	Mathematical Modeling and Optimization for a Microalgaebased Wastewater Treatmen System.	Assistant Professor Dr. Somkid Amornsamankul	1. Associate Professor Dr. Wannapong Triampo Mahidol University 2. Dr. Busayamat Pimpunchart King Mongkut 's Institute of Technology Ladkrabang
	Stochastic modelling and simulations of GPCR-Mediated sensory response: calcium-dependent regulation and G Protein	Professor Dr. Yongwimon Lenbury	1. Assistant Professor Dr. Darapond Triampo Mahidol University 2. Dr. Charin Modchang Mahidol University 3. Assistant Professor Dr. Chontita Rattanakul Mahidol University
	The Environmental and Economic Impacts on Marine Ecosystems.	Dr. Kornkanok Bunwong	1. Dr. Wichuda Sae-jea Mahidol University 2. Dr. Elvin J. Moore King Mongkut 's University of Technology North Bangkok 3. Dr. Ratchada Pattaranit Naresuan University
Ramkhamhaeng University	Graphs having panconnected square.	Dr. Sirirat Singhum	-
Srinakharinwirot University	The consistency and stability solutions of the impulsive second-order differential equations	Dr. Sirirat Suksai	-
Silpakorn University	On vectorial regularization techniques and fast numerical algorithms for variational image registration	Dr. Noppadol Chumchob	-
	Coregular transformations semigroups.	Dr. Tiwadee Musunthia	-

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	Dualisabilities on Preprimal Algebras and Hyperstructure.	Professor Dr. Chawewan Ratanaprasert	1. Associate Professor Dr. Thawhat Changphas Khon Kaen University 2. Dr. Ratana Srithus Silpakorn University 3. Dr. Wattapong Puninagool Udon Thani Rajaphat University
Prince of Songkla University	Confidence Intervals and the Delta Method	Dr. Patthawan Tongkumchup	1. Dr. Ratikan Sae-lim Prince of Songkla University 2. Dr. Nifatmha Makaja Prince of Songkla University
	A Cantor $p$ -ary Decomposition on the Hilbert Cube	Dr. Aniruth Phon-on	-
	Option pricing analysis based on an approximate numerical mode	Dr. Arthit Intarasit	-
	Common Fixed Point Theorems for some Nonlinear Mappings on Banach and Convex Metric Spaces.	Dr. Orawan Treepak	-
Ubonrajathani University	A comparative study of characteristics between a viscous incompressible flow past two rotating circular cylinders and a rotating torus about its centerline.	Dr. Pairin Suwansri	-
	Developing mathematical modeling activities for middle school level.	Dr. Supot Seebut	-
	Developing hands-on- Mathematical activities for kindergarten classrooms.	Dr. Sasitorn pasjuso	-
	Development of Assistant Learning Program for Multivariable Calculus Using Symbolic Package.	Dr. Sakda Noinang	-
King Mongkut's Institute of Technology Ladkrabang	Finding some 2-partite and 3-partite Ramsey Numbers.	Dr. Decha Somna	-