Program of the Joint Conference for the 23rd ATCM and the 2nd ISIMMED

November 20-24, 2018, Yogyakarta State University, Indonesia

November 20, 2018 (Tuesday*)*

17:00-18:00	**Registration**:
18:30-21:00	**Welcome Reception**

November 21, 2018 (Wednesday)

7:30-8:30	**Registration**
8:30-9:30	**Opening ceremony**
9:30-10:00	**Tea Break**

10:00-10:50	**Plenary Speech 1: Auditorium Room , Chair:** Weng Kin HO
	21657 Strong Algebraic Manipulation Skills Are Not Adequate For Cultivating Creativity And Innovation Wei-Chi Yang
11:00-12:00	**Invited Speaker 1: FMIPA Seminar Room 1:** (**Chair:**) 21664 MYMA Calculus: A comprehensive e-Textbook and Online Homework System-**Douglas Meade**
	Invited Speaker 2: FMIPA Seminar Room 2: (Chair:) TBA CHEN, Ouhao

12:00-13:00	**Lunch Break**

13:00-13:50	**Special Session Speaker: FMIPA Seminar Room 1**: (**Chair: Ron Lancaster**) 21575 ClassPad.net: A new online environment for doing and learning mathematics-Barry Kissane
14:00-15:00	**Parallel Session I. Presentations (Each contributed paper presentation slot is 25 minutes, unless otherwise specified. Please allow 3 minutes for Q&A, and 2 minutes for changeover)**
	Room 1: (Chair: Faqir Bhatti**)**
	14:00-14:25 21615 Learning and Teaching of Group Theory through Visualization using Graphs- Faqir Bhatti, Khawaj fahd
	14:30-14:55 21617 On Applications of Technology to Understanding Hierarchies of Elementary Geometry- Yosuke Sato, Ryoya Fukasaku, Katsusuke Nabeshima
	Room 2: (Chair: Maree Skillen**)**
	14:00-14:25 21629 Unlocking the Power of Data: Teaching Statistics to First-Year Life Science Students- Maree Skillen

	14:30-14:55	99 Pedagogical Content Knowledge in Undergraduate Teaching Mathematics Education - R. Rosnawati
Room 3: (Chair: Ahmad Junaedi)		
	14:00-14:25	10 The Comparison of Cooperative Learning model Teams Games Tournaments (TGT) and Teams Assisted Individualization (TAI) Types viewed from Emotional Intelligent on Seventh Grade Student of Junior High School - Ahmad Junaedi
	14:30-14:55	22 Prospective mathematics teachers' understanding of pedagogical knowledge: what and where it came from - Putri Solekhah, Heri Retnawati
Room 4: (Chair: Heri Retnawati)		
	14:00-14:25	24 Scaffolding for International Students in Statistics Lecture - Heri Retnawati
	14:30-14:55	83 Teacher Behavior in Student's Critical Thinking Ability Development - Sehatta Saragih
Room 5: (Chair: Habibullah)		
	14:00-14:25	39 An Analysis on Difficulties in Solving the Word Problem of Eighth Grade Students' in MTs Negeri 3 Indragiri Hilir - Habibullah; Hartono
	14:30-14:55	31 Why I Am Confused To Apply Mathematics Concept: Student Perspective Of Mathematics Role In Daily Life - Gamarina Isti Ratnasari
Room 6: (Chair: Lana Sugiarti)		
	14:00-14:25	44 Analysis of Students Difficulties on Algebra Problem Solving in Junior High School - Lana Sugiarti
	14:30-14:55	75 Analysis of Vocational School Students' Errors of Aljabar Function Limit Problem - Rosnida Nurhayati
Room 7: (Chair: Dina Tri Utari)		
	14:00-14:25	4 Forecasting Indonesian GDP Growth using Mixed Data Sampling (MIDAS) Regression - Dina Tri Utari
	14:30-14:55	90 Soft Computation of Extreme Rainfall Prediction Based on Block Maxima Data Representation - Hasbi Yasin; Arief Rachman Hakim; Budi Warsito; Rukun Santoso
Room 8: (Chair: Lilis Suryani)		
	14:00-14:25	65 Analysis of Laplace Transforms on String-Beam Model - Lilis Suryani
	14:30-14:55	98 Review Properties Solutions the Mathematical Models of Transition Time Traffic Congestion - Zahrul Jannah Nur Rochim ; Hartono
Room 9: (Chair: Akik Hidayat)		
	14:00-14:25	87 Analysis of execution time, memory and CPU usage on AES cryptography operation mode - Akik Hidayat; khairil A Azhari; Deni Setiana; Rudi Rosadi
	14:30-14:55	3 Mathematics Model Construction of the Law of Mass to Reduce Traffic Levels in Indonesia - Prihantini
14:00 - 15:00	**Hands-on Workshops** (GC stands for calculator workshops; CW stands for computer workshops)	
	(GC Room) 21575 ClassPad.net: A new online environment for doing and learning mathematics-Barry Kissane	
	(CW1 Computer Room 1) 21618 Discovering the online freeware Cabri Express-Jean-Jacques Dahan, Jean-Marie Laborde	

15:00-15:30	**Tea Break**	
15:30-16:25	**Parallel Session I. Presentations (Each contributed paper presentation slot is 25 minutes, unless otherwise specified. Please allow 3 minutes for Q&A, and 2 minutes for changeover)**	
	Room 1: (Chair: MAXIMA ACELAJADO)	
	15:30-15:55	21612 Effects of the Traditional Flipped and the In-Class Flipped Classroom Models on the Students'' Performance in Geometry: A Comparative Analysis- MAXIMA ACELAJADO, MIGUEL PUNONGBAYAN
	16:00-16:25	21613 Blended Learning Station-Rotation Model: Effects on Grade 10 Students' Performance in and Attitude Toward Mathematics- MAXIMA ACELAJADO, MARIANNE MONDRAGON
	Room 2: (Chair Chandra Sri Ubayanti:)	
	15:30-15:55	21631 How To Increase Lower Order Thinking Skills To Higher Order Thinking Skills Through Modifying Problems Using The fx-991 ID Plus Scientific Calculator- Chandra Sri Ubayanti
	16:00-16:25	92 The development of learning trajectory using spinner boards to facilitate students' sense of probability - Nila Mareta Murdiyani, Sugiman
	Room 3: (Chair Yerizon:)	
	15:30-15:55	111 Practicality of APOS-Calculus Worksheet to Improve Student's Mathematical Communication Ability - Yerizon; Armiati
	16:00-16:25	15 Mathematics learning video: practical or not? - Vidiya Rachmawati
	Room 4: (Chair Ayundyah Kesumawati:)	
	15:30-15:55	96 Implementation Interactive Learning for MOOC Initiation Based on Student Centre Learning - Ayundyah Kesumawati
	16:00-16:25	110 Implementation of Discovery Learning and Adapted SKKNI to Optimize Learning Outcome - Arum Handini Primandari; Dina Tri Utari
	Room 5: (Chair Shinta Metikasari:)	
	15:30-15:55	57 Mathematics Learning Difficulties of Slow Learners on A Circle - Shinta Metikasari
	16:00-16:25	85 How Is Students Error Analysis of Working About Pythagoras Elements Problems? - Rospala Hanisah Yukti Sari, Dhoriva Urwatul Wutsqa, Heri Retnawati
	Room 6: (Chair Ratnah Lestary:)	
	15:30-15:55	50 Analysis of Students' Mathematical Reasoning Ability in Statistic Problems Solving Based on SOLO Taxonomy - Ratnah Lestary; Subanji; Rustanto Rahardi
	16:00-16:25	32 Students' Ability of Mathematical Problem-Solving Based on SOLO Taxonomy - Dimas Candra Saputra, Heri Retnawati
	Room 7: (Chair Kezia N. P. Prasetia:)	
	15:30-15:55	84 Modeling the returns volatility using GARCH (1,1) model under Box–Cox transformations - Kezia N. P. Prasetia; Rebecca Rorimpandey; Didit B. Nugroho; Bambang Susanto
	16:00-16:25	13 Utilizing a triangular fuzzy chain-ladder in claims reserving of Indonesian general insurance - Mujiati Dwi Kartikasari
	Room 8: (Chair Musthofa:)	

	15:30-15:55	104 Permutation in De Bruijn Sequence - Musthofa
	16:00-16:25	107 Modules and Their Endomorphism Rings - Hery Susanto; Santi Irawati; Indriati Nurul Hidayah; Irawati
Room 9: (Chair Musthofa:)		
	15:30-15:55	6 Biometric Patterns of Eye Iris by Using Hidden Markov Model - Nur Hadi Waryanto, M.Eng
	16:00-16:25	61 Stationary distribution of the non-homogen QBD processes via successive lumping method - Dwi Ertiningsih
15:30 - 16:25	**Hands-on Workshops** (GC stands for calculator workshops; CW stands for computer workshops)	
	(GC Room) 21573 Using a Graphics Calculator for Learning Mathematics- Barry Kissane	

09:00-17:00	**Exhibitions**
18:30-21:00	**Conference Dinner and Culture Night**

November 22, 2018 (Thursday)

7:30-8:30 **Registration:**	
8:30-9:20	**Plenary Speech 2** FMIPA Seminar Room 1**: Chair:** Barry Kissane
	Mathematical walks with mobile technology- Ron Lancaster

9:30-10:00 Tea Break

10:00-10:50 Invited Speeches

10:00-10:50	**Invited Speaker 3: FMIPA Seminar Room 1: (Chair:** Jean-Jacques DAHAN**)** 21662 Exploiting Excel's Data Table Creatively in the Study of Mathematics - Graham Supiri and Deane Arganbright **Invited Speaker 4: FMIPA Seminar Room 2: (Chair:** Haitham S. SOLH**)** 21642 Creating a Symbiotic Relationship between Epistemology of Combinatorics and STEM Teaching Process- Haslinda Ibrahim
11:00-12:00	**Parallel Session IV. Presentations (Each contributed paper presentation slot is 25 minutes, unless otherwise specified. Please allow 3 minutes for Q&A, and 2 minutes for changeover)**
	Room 1: (Chair: Ika Wulandari **)**
	11:00-11:25 21604 Overcoming Identified Learning Difficulties in Trigonometry Using Casio Classwiz fx-991EX- Ika Wulandari, Triana Harmini, Siti Suprihatiningsih
	11:30-11:55 21630 Integration of Classwiz Calculator to Deliver Hots Concepts of Mathematics Learning in Indonesian Senior High School- Khairuddin Budiman
	Room 2: (Chair: Russel Carlson**)**
	11:00-11:25 21625 Improving Student Learning Outcomes by Using an Applet in Class- Russel Carlson
	11:30-11:55 21655 Professional Development for Mathematics Teachers: Using a New Hypermedia Video-Case Tool- Hang Chen, Jian-sheng Bao
	Room 3: (Chair: Widuri Asmaranti**)**
	11:00-11:25 76 YouTube's implementation of students' reasoning abilities - Widuri Asmaranti
	11:30-11:55 30 Student's Critical Thinking Ability Development in Learning - Sehatta Saragih
	Room 4: (Chair: Mukhlas Triono**)**
	11:00-11:25 103 Validity Assessment of a Multimedia Based on Cognitive Load Theory for Undergraduate Plane Geometry Learning - Mukhlas Triono; Endah Retnowati
	11:30-11:55 51 Improving Mathematical Beliefs of Pre-service Teacher through Valsiner Zone Learning - Sri Tirto Madawistama
	Room 5: (Chair: Rospala Hanisah Yukti Sari**)**
	11:00-11:25 86 Emotional Intellegence: How Important to Develop It? - Rospala Hanisah Yukti Sari, Dhoriva Urwatul Wutsqa, Heri Retnawati
	11:30-11:55 46 Mathematic Learning Outcomes in Geometry Viewed From Spatial Intelligence - Indah Werdiningsih

Room 6: (Chair: Irham Baskoro**)**		
	11:00-11:25	28 Analysing Vocational School Students' Error in Solving Mathematics Problems Involving Higher Order Thinking Skills - Irham Baskoro, Heri Retnawati
	11:30-11:55	73 Instrument of Reflective Thinking Skills of Junior High School Student - Dessy Puspitasari Rusdiana
Room 7: (Chair: Sugito**)**		
	11:00-11:25	89 Rainfall and Wave Height Prediction in Semarang City Using Vector Autoregressive Neural Network (VAR-NN) Methods - Sugito, Arief Rachman Hakim, Hasbi Yasin, Mustafid, Diah Safitri
	11:30-11:55	88 Application of SARIMA model on rainfall forecasts as an effort to optimize agriculture production in Sleman, Yogyakarta - Alfazrin Banapon ; Intan Ramadhani ; Dina Tri Utari
Room 8: (Chair: Hj Epon Nur'aeni L**)**		
	11:00-11:25	66 Didactical Design of the Area of Triangles Based on Dam-daman Traditional Games in Primary School - Hj Epon Nur'aeni L
	11:30-11:55	100 Construction of Dandelin Sphere on Definition of Conics using GeoGebra Classic 5 - Naela Faza Fariha; Himmawati Puji Lestari
Room 9: (Chair: Nikenasih Binatari**)**		
	11:00-11:25	109 Multiple Scale Method in Speed-Gradient Model with Perturbations – Nikenasih Binatari
	11:30-11:55	80 Application of Nash Equilibrium to Determine Economic Order Quantity of A Continuous Review of Probabilistic Manufacturer-Retailer Supply Chain Model for Imperfect Quantity - Rubono Setiawan
11:00-12:00	**Hands-on Workshops** (GC stands for calculator workshops; CW stands for computer workshops)	
	(GC Room –**Laboratory Room**) 21649 Posing Powerful Questions by Exploring World Flag-Ron Lancaster	
	(CW Computer Room 2) 21661 Eye-Catching Mathematical Graphics with Excel-Deane Arganbright, Graham Supiri	

12:00-13:00 **Lunch Break**		
13:00-13:50	**Invited Speaker 5: FMIPA Seminar Room 1**: (**Chair:** Deane ARGANBRIGHT) 21654 An Expert Approach of the Different Ways to Use the New Cabri and the Richness of its Connections with the Online Freeware Cabri Express-Jean-Jacques Dahan	
	Invited Speaker 6: FMIPA Seminar Room 2: (**Chair:** Guillermo DAVILA-RASCON) 21599 Computational Thinking in the Mathematics Classroom-Jonaki Ghosh	
14:00-15:00	**Parallel Session I. Presentations (Each contributed paper presentation slot is 25 minutes, unless otherwise specified. Please allow 3 minutes for Q&A, and 2 minutes for changeover)**	
Room 1: (Chair: Leslie Chandrakantha**)**		
	14:00-14:25	21620 Simulating Confidence Intervals for Mean and Variance using Real Data in R Programming Environment- Leslie Chandrakantha

	14:30-14:55	21627 Empirical Research on Mathematical Inquiry Based Dynamic Software in the Lesson Study Training- Li HongYun, ChunLan Wu
Room 2: (Chair: Mega Nur Prabawati)		
	14:00-14:25	45 The Integration Of Mathematical Character Values In Junior High School Through Problem Based Learning with Heuristic Strategy - Mega Nur Prabawati
	14:30-14:55	94 Learning mathematics from the erroneous example in the individual and collaborative setting: is it effective for facilitating students' mathematical disposition? - Ibnu Rafi; Wahyu Setyaningrum
Room 3: (Chair: Joko Purnomo)		
	14:00-14:25	2 Readiness of ICT Literacy High school math teacher Toward Learning with a Heutagogical Approach - Joko Purnomo, Herman Dwi Surjono
	14:30-14:55	72 Didactical Design of Square Circumference based on Petak Umpet Traditional Game in Elementary School - Hj. Epon Nur'aeni; Lia Oktaviani; Ika Fitri Apriani
Room 4: (Chair: Kuswari Hernawati)		
	14:00-14:25	1 Improving Trigonometry Learning Motivation Using Geogebra-Assisted Guided Discovery Student Worksheet (GDSW) – Kuswari Hernawati; Herman Dwi Surjono
	14:30-14:55	81 Implementation Of Cooperative Learning Type Number Head Together (NHT) To Improve Learning Independence Of 7thClass Students In SMP Negeri 1 Siak Hulu - Astri Wahyuni, M.Pd
Room 5: (Chair: Hari Purnomo Susanto)		
	14:00-14:25	69 The Analysis of Correlation between Students' Anxiety and Positive Attitudes toward Mathematic Using fuzzy Interval data and fuzzy correlation - Hari Purnomo Susanto
	14:30-14:55	25 Learning Algebra: Being a Challenge for Students in The Early Grade - Trisylia Ida Pramesti
Room 6: (Chair: Nita Delima)		
	14:00-14:25	11 Students' Mathematics Self-Concept and Their Learning Style - Nita Delima
	14:30-14:55	21 The Urgency of Representational Flexibility in Mathematics Learning - Metia Novianti, Heri Retnawati
Room 7: (Chair: Dina Tri Utari)		
	14:00-14:25	70 The Comparison of K-Means and K-Medoids Methods in Clustering of Disaster-Prone Areas in East Kutai Regency in 2017 - Dina Tri Utari; Aulia Sholehah Putri Cesar
	14:30-14:55	14 The Analysis of Mutual Funds Performance Model Accuracy - Siti Samsiyah Purwaningsih
Room 8: (Chair: Heri Retnawati)		
	14:00-14:25	37 Learning Obstacles among Indonesian Eighth Graders on Ratio and Proportion - Ayunda Sri W., Didi Suryadi, Turmudi
	14:30-14:55	18 The Role of Spatial Experience in Mental Rotation - Alfiramita Hertanti, Heri Retnawati, Dhoriva Urwatul Wutsqa
Room 9: (Chair: Sri Andayani)		

	14:00-14:25	97 The Improvement Construction of Weighting Method using Rating Scale and FANP – Sri Andayani
	14:30-14:55	78 Optimal Tracking Control Problem Of Multiple Dubin's Car System With Tracking Error Dynamics - Miswanto
14:00 - 15:00	**Hands-on Workshops** (GC stands for calculator workshops; CW stands for computer workshops)	
	(GC Room- **Laboratory Room 1**) 21652 Explore, Discover, Develop (ExDiD): Nurturing an Inquisitive Mind- Haslinda Ibrahim	
	(GC Room –**Laboratory Room 2**) 21574 Learning School Mathematics with ClassWiz, an Advanced Scientific Calculator- Barry Kissane	
15:00-15:30	**Tea Break**	
15:30-16:30	**Parallel Session I. Presentations (Each contributed paper presentation slot is 25 minutes, unless otherwise specified. Please allow 3 minutes for Q&A, and 2 minutes for changeover)**	
	Room 1: (Chair: Ambreen Zehra**)**	
	15:30-15:55	21626 Misconceptions of Differential and Integration Technique among Engineering Students: A Case Study- Sarwar Jahan Abbasi, Ambreen Zehra
	16:00-16:25	82 Implementation of Numbered Heads Together (NHT) Cooperative Learning to Improve Mathematical Communication Ability of Class VIII Mts YKWI Pekanbaru - Putri Wahyuni
	Room 2: (Chair: Rahma Hayati**)**	
	15:30-15:55	35 Prior Knowledge Misconception of Mathematics Middle School Students: Teachers' Difficulties and Strategies - Rahma Hayati, Heri Retnawati
	16:00-16:25	79 Implementation Interactive Learning for MOOC Initiation Based on Student Centre Learning - Ayundyah Kesumawati
	Room 3: (Chair: Syukrul Hamdi**)**	
	15:30-15:55	55 Team Teaching Collaborative Learning Model for Statistic Subject at Language Department - Syukrul Hamdi
	16:00-16:25	36 Profile of Students' Mathematics Anxiety - Luthfi Nur Azizah, Ali Mahmudi, Heri Retnawwati
	Room 4: (Chair: Nitta Puspitasari**)**	
	15:30-15:55	53 Improving of Students' Mathematical Problems Posing Ability through Metacognitive Learning - Nitta Puspitasari
	16:00-16:25	34 Investigation of Students' Number Sense in Term of Fraction - Maghfirah, Ali Mahmudi, Heri Retnawati
	Room 5: (Chair: Nani Ratnaningsih**)**	
	15:30-15:55	59 Student's Mathematical Creative Thinking Process Based on Stages Wallas and Personality Types - Nani Ratnaningsih
	16:00-16:25	19 Metacognitive awareness: how it affects mathematical problem-solving process - Rahmi Puspita Arum, Heri Retnawati
	Room 6: (Chair: Elsa Susanti**)**	
	15:30-15:55	58 An Analysis Mathematical Problem Solving and Mathematical Critical Thinking of Junior High School Students - Elsa Susanti; Hartono

	16:00-16:25	41 Students' Mathematical Connection in Solving Real-world Problems - Andi Gusmaulia Eka Putri, Heri Retnawati, Dhoriva Urwatul Wutsqa
Room 7: (Chair: Rosita Kusumawati)		
	15:30-15:55	112 Comparison Performance of Naive Bayes Classifier and Support Vector Machine Algorithm for Twitter's Classification of Tokopedia Services - Rosita Kusumawati, Afrida Dzul A, and Putri Anjaswati P
	16:00-16:25	8 Comparison of chain-ladder, Bornhuetter-Ferguson, and Benktander-Hovinen method for individual claims reserving - Mujiati Dwi Kartikasari
Room 8: (Chair: Angga Kristiyajati)		
	15:30-15:55	27 Analysis of sixth graders' difficulties in solving mathematics word problems on whole numbers, fractions, and decimals - Ulivia Isnawati Kusuma, Heri Retnawati
	16:00-16:25	16 The Role of Proofs Without Words (PWWs) in Helping Students Understand the Cosine of the Sum - Angga Kristiyajati, Heri Retnawati, Ariyadi Wijaya
Room 9: (Chair: Aditya Wisnugraha Sugiyarto)		
	15:30-15:55	63 Prediction of Student Learning Achievement Based on Intelligence Quotient (IQ), Academic Potential Test (TPA), and Learning Motivation Using Mamdani Method Fuzzy Logic - Aditya Wisnugraha Sugiyarto
	16:00-16:25	12 Computer Assisted Learning on Aridity Disaster Learning Using SIMIA (Satellite Imagery for Modelling Index of Aridity) - Mila Chrismawati Paseleng; Sri Yulianto Joko Prasetyo; Kristoko Dwi Hartomo
15:30 - 16:30	**Hands-on Workshops** (GC stands for calculator workshops; CW stands for computer workshops)	
	(GC Room – Laboratory Room 1) 21639 Exploring concepts and applications of mathematics using Casio teaching tools: Jonaki Ghosh	
	(CW Computer Room 1) 21619 Modelling the Moebius strip with Cabri 3D- Jean-Jacques Dahan, Jean-Marie Laborde	
18:30-21:00 **IPC meeting**		

November 23, 2018 (Friday)

7:30-8:30 **Registration:**	
8:30-9:20	**Plenary Speech 3: FMIPA Seminar Room 1: Chair:** Wei-Chi Yang
	21651 Can Secondary School Mathematics Students Be Taught Computational Thinking?-Weng Kin Ho

9:30-10:00 Tea Break

10:00-10:50 Invited Speeches

10:00-10:50	**Invited Speaker 7: FMIPA Seminar Room 1:** **(Chair**: José Antonio VALLEJO**)** 21632 Synchronization of Chaos-Guillermo Davila-Rascon **Invited Speaker 8: FMIPA Seminar Room 2:** **(Chair:** Deane ARGANBRIGHT **)** 31001 Using Dynamic Geometry Software in High School in Vietnam: The case of geometrical construction problems in space-Nguyen Chi Thanh
11:00-12:00	**Parallel Session IV. Presentations (Each contributed paper presentation slot is 25 minutes, unless otherwise specified. Please allow 3 minutes for Q&A, and 2 minutes for changeover)**
	Room 1: (Chair: Yasuyuki Nakamura **)**
	11:00-11:25 21601 E-learning System with Computer Algebra based on JavaScript programming language- Takuya Kitamoto, Masataka Kaneko, Setsuo Takato
	11:30-11:55 21605 Improvement of the Usability of Figures in STACK by Use of CindyScript and CindyJS- Kenji Fukazawa, Yasuyuki Nakamura
	Room 2: (Chair: Ace Ceremonia**)**
	11:00-11:25 21570 Spaced Learning Strategy in Teaching Mathematics Ace Ceremonia and Remalyn Casem
	11:30-11:55 21663 The Mathematics Class Using the Tablet PCs- Tsutomu Ishii
	Room 3: (Chair: Muhammad Kamaluddin**)**
	11:00-11:25 33 Map of Influence in Discovery Learning on Students' Mathematics Learning Outcomes: A Systematic Literature Review - Muhammad Kamaluddin, Djamilah Bondan Widjajanti
	11:30-11:55 49 The Effectiveness of Metaphorical Thinking learning in Terms of Achievement, Problem Solving Skill, and Self-efficacy - Fitriani
	Room 4: (Chair: Mariana Ramelan**)**
	11:00-11:25 54 A comparative analysis of probability in JHS Indonesian and Singaporean mathematics textbooks from the perspective of mathematical creativity - Mariana Ramelan, Ariyadi Wijaya
	11:30-11:55 52 Authentic Investigation Activity: pictorial representation of pre-service mathematics teachers' - Puji Lestari
	Room 5: (Chair: Sugiman**)**
	11:00-11:25 68 The identification of students' didactic obstacles in learning fractions based on the form of the problems - Sugiman, Nila Mareta Murdiyani
	11:30-11:55 62 Content Analysis of HOTS in Mathematics National Exam - Arung Mega Ratna, Heri Retnawati

Room 6: (Chair: Salmaini Safitri Syam**)**		
	11:00-11:25	47 Comparison of Modeling Task in Indonesian and Singapore Textbooks - Salmaini Safitri Syam, Ariyadi Wijaya, Heri Retnawati
	11:30-11:55	
Room 7: (Chair: Dhoriva Urwatul Wutsqa**)**		
	11:00-11:25	95 Welfare Mapping of Region in Indonesia based on Health and Nutrition Indicators using Self Organizing Mapping (SOM) Method - Dhoriva Urwatul Wutsqa; Kismiantini; Retno Subekti
	11:30-11:55	91 Empirical performance of GARCH, GARCH-M, GJR-GARCH and log-GARCH models for returns volatility - Dini Kurniawati; Lam P. Panjaitan; Zaini Kholil; Didit B. Nugroho; Bambang Susanto; Leopoldus R. Sasongko
Room 8: (Chair: Djamilah Bondan Widjajanti **)**		
	11:00-11:25	74 Making mathematics classes more humanistic - Djamilah Bondan Widjajanti
	11:30-11:55	56 Ing Ngarsa Sung Tuladha Learning Model - Kartini Hutagaol; Louise M. Siaja; Debora Chaterin Simanjuntak
Room 9: (Chair:)		
	11:00-11:25	108 Coffee prices and its derivatives : Evidence from the Indonesian market - Ade Latip;Nikenasih Binatari
	11:30-11:55	

11:00-12:00	**Hands-on Workshops** (GC stands for calculator workshops; CW stands for computer workshops)
	(GC Room) 21650 Experimenting with equations and their graphs-Ron Lancaster
	(CW1 Computer Room 1) 21640 **(Part 1)** Image Processing with the CAS Maxima-Guillermo Davila-Rascon, Jose Antonio Vallejo

12:00-13:00 **Lunch Break**	
13:00-13:50	**Invited Speaker 9: FMIPA Seminar Room 1**: (**Chair:** Guillermo DAVILA-RASCON) 21641 Correcting errors: putting elementary topology to work- Juan Medina & Jose A Vallejo
	Invited Speaker 10: FMIPA Seminar Room 2: (**Chair:** Haslinda Bt IBRAHIM) 21634 Friend or Foe: The Dangers of Dependence on Online Platforms for Conceptual Understanding- Haitham Solh
14:00-15:00	**Parallel Session I. Presentations (Each contributed paper presentation slot is 25 minutes, unless otherwise specified. Please allow 3 minutes for Q&A, and 2 minutes for changeover)**
	Room 1: (Chair: Rahul Mukherjee**)**
	14:00-14:25 21579 Order of Addition: Theory and Algorithms- Rahul Mukherjee

	14:30-14:55	21585 Clustering Induced Binary Classification with Asymmetric Misclassification Cost- Uttam Kumar Sarkar
Room 2: (Chair: Jeongwhan Choi**)**		
	14:00-14:25	21582 A Mathematical and Experimental Studies of a Free Surface Wave- Jeongwhan Choi, Sungha Yoon
	14:30-14:55	21660 Conjugacy Maps and Dynamics of a Family of Optimal Fourth-Order Multiple-Zero Finders- Young Hee Geum
Room 3: (Chair: Heri Retnawati**)**		
	14:00-14:25	42 Scaffolding for International Students in Statistics Lecture - Heri Retnawati
	14:30-14:55	77 Emotional Intellegence: How Important to Develop It? - Rospala Hanisah Yukti Sari, Dhoriva Urwatul Wutsqa, Heri Retnawati
Room 4: (Chair: Kholifatun Nur Rokhmah**)**		
	14:00-14:25	26 Mathematical resilience: Is that affecting the students' mathematics achievement? - Kholifatun Nur Rokhmah, Heri Retnawati
	14:30-14:55	43 Open Ended Approach and Group Discussion Learning : an Exploration of Mathematical Problem Solving Skill - Nelly Rhosyida;Trisniawati;Flora Grace Putrianti
Room 5: (Chair: Auliaul Fitrah Samsuddin **)**		
	14:00-14:25	23 Students' Difficulties in Solving Rich-Tasks: Mathematical Etude on Practice - Auliaul Fitrah Samsuddin, Heri Retnawati
	14:30-14:55	93 Development of Multimedia Learning Based on Contextual Approach on Triangles and Quadrilaterals - Doni Setiyo Ardiyanto;Ali Mahmudi
Room 6: (Chair: Irwan**)**		
	14:00-14:25	101 The Development of Mathematics Learning Tools Based on Model Eliciting Activities (MEAS) Approach to Imrpove Concepts Understanding Skill of Students of Grade VII Junior High School - Irwan, Ahmad Fauzan
	14:30-14:55	20 SKTM and Achievement Based Students' Learning Outcome, Is There Any Different? - Yustine Maulina, Heri Retnawati
Room 7: (Chair: Syarifah Inayati**)**		
	14:00-14:25	9 Use of second order Markov chains to analyse the availability of shampoo product marketing (A case study of Dove shampoo on Pamella 1 supermarket in Yogyakarta) - Syarifah Inayati
	14:30-14:55	71 Comparison of Influence between Geographical and Population Factor against Flood in Indonesia in 2017 using Spatial Regression - Dina Tri Utari; Wahyu Pratama Jati
Room 8: (Chair: Louise M Saija **)**		
	14:00-14:25	105 Undergraduate students' motivation and self-regulated learning in learning statistics: Female vs male - Louise M Saija
	14:30-14:55	67 The Interaction Effects of Students' Mathematical Disposition and Gender towards Learning Achievement - Ilania Eka Andari, Sugiman
Room 9: (Chair: Elmanani Simamora **)**		

	14:00-14:25	7 Better Bootstrap Confidence Intervals for Parameter estimators of Kriging Model Based on Semiparametric Bootstrapping - Elmanani Simamora
	14:30-14:55	102 Land Measurement by Utilizing Bootstrap Polygon Approach Method Based on Utilizing Global Administrative Area (GADM) Data Base - Adi Setiawan; Eko Sediyono
14:00 - 15:00	**Hands-on Workshops** (GC stands for calculator workshops; CW stands for computer workshops)	
	(GC Room - **Laboratory Room 1**) 21653 Using Technology to Enhance Students'' Conceptual Understanding of Transcendental Functions-Haitham Solh	
	(GC Room - **Laboratory Room 2**) 21658 Teaching Computational Thinking to Secondary School Mathematics Students- Weng Kin Ho	
15:00-15:30	**Tea Breaks**	
15:30-16:30	**Parallel Session I. Presentations (Each contributed paper presentation slot is 25 minutes, unless otherwise specified. Please allow 3 minutes for Q&A, and 2 minutes for changeover)**	
	Room 1: (Chair: SAIBAL CHATTOPADHYAY**)**	
	15:30-15:55	21586 On estimation of Gini Index for grouped data using asymmetric loss- SAIBAL CHATTOPADHYAY
	16:00-16:25	21602 Data Simulation with Markov Chain Monte Carlo, Gibbs Sampling, and Bayes (Beta-Binomial) Methods as the Parameter Estimations of Spatial Bivariate Probit Regression Model- Dewi Retno Sari Saputro, Yuanita Kusuma Wardani, Shaifuddin Zuhdi, Purnami Widyaningsih
	Room 2: (Chair: Elli Susilawati**)**	
	15:30-15:55	60 Research Action Class to Increase Self-Efficacy on Mathematics Student Grade VII of Senior High School Hamong Putera using Inkuiri Approach - Elli Susilawati
	16:00-16:25	40 Is it difficult to teach higher order thinking skills? - Ilma Rizki Nur Afifah, Heri Retnawati
	Room 3: (Chair:)	
	15:30-15:55	106 Application of HAM for Solving The Elections Model - Benny Yong
	16:00-16:25	5 Mathematical Model Construction of Mass Conservation Law's Derivative to Reduce the Traffic Congestion in Indonesia - Glagah Eskacakra Setyowisnu
	Room 4: (Chair:)	
	15:30-15:55	TBA
	16:00-16:25	TBA
	Room 5: (Chair:)	
	15:30-15:55	TBA
	16:00-16:25	TBA

Room 6: (Chair:)			
	15:30-15:55	TBA	
	16:00-16:25	TBA	
Room 7: (Chair:)			
	15:30-15:55	TBA	
	16:00-16:25	TBA	
Room 8: (Chair:)			
	15:30-15:55	TBA	
	16:00-16:25	TBA	
Room 9: (Chair:)			
	15:30-15:55	TBA	
	16:00-16:25	TBA	
15:30 - 16:30	**Hands-on Workshops** (GC stands for calculator workshops; CW stands for computer workshops)		
	(CW Computer Room 1) 21640 (Part 2) Image Processing with the CAS Maxima-Guillermo Davilla-Rascon, Jose Antonio Vallejo		
	(CW Computer Room 2) 21598 STACK: an online assessment system for mathematics-Yasuyuki Nakamura, Yuko Ichikawa, Takahiro Nakahara, Yoshinori Miyazaki, Saburo Higuchi, Kentaro Yoshitomi		

18:30-   Social and free time

November 24, 2018 (Saturday)

Time	Event
7:30-8:30	**Registration**
8:30-9:30	**Plenary Speech 4: FMIPA Seminar Room 1: (Chair:** Dr. Hartono**)**
	TBA –Salang Musikasuwan, Ph.D
9:30-10:00	**Tea Break**
10:00-10:50	**Invited Speaker 11: FMIPA Seminar Room 1: (Chair:** TBA**)**
	Using Euler Maths Toolbox (EMT) for Teaching Numerical Methods, A Migration from Commercial (MATLAB) to Free Software *–Sahid, MSc.*
10:00 - 11:00	**Hands-on Workshops** (GC stands for calculator workshops; CW stands for computer workshops)
	(GC Room -**FMIPA Seminar Room 2**) 21584 Teaching Statistics and Visualization with QR Codes- Wei Ching Quek
11:00-12:00	**Closing Ceremony FMIPA Seminar Room 1**
12:00-13:00	**Lunch and Farewell**