

## 2008년도 가을 연구발표회 발표 논문목록

(\*발표자: 가나다 순)

Alejandro Adem(Univ. of British Columbia & PIMS) : Commuting matrices and spaces of homomorphisms

Heisuke Hironaka(Harvard Univ.) : TBA

백진호(Univ. of Michigan) : Random permutations and random matrices

Habib Ammari(Ecole Polytechnique & CNRS) : Asymptotic spectral analysis with applications in imaging, effective medium theory, and optimal design

Michèle Artigue(Université de Paris VII) : Digital technologies and mathematics education

Bernard R. Hodgson(Univ. Laval) : Some views on ICMI at the dawn of its second century

Hoon Hong(North Carolina State Univ.): Subresultants in Roots

Masaki Kashiwara(Kyoto Univ.) : Crystal bases and combinatorics

Anthony To-Ming Lau(Univ. of Alberta) : Separation and extension properties for positive definite functions for groups

Tohru Ozawa(Hokkaido Univ.) : Global existence of analytic solutions to nonlinear Schrödinger equations

Roland Speicher(Queens Univ.) : Invariance under quantum permutations and free probability theory

Ulrike Tillmann(Oxford Univ.) : The cohomology of moduli spaces

Nicole Tomczak-Jaegermann(Univ. of Alberta) : Random embeddings and other high-dimensional geometric phenomena

Takao Yamaguchi(Univ. of Tsukuba) : Collapsing and essential coverings of Riemannian manifolds

곽진호(포항공대) : Enumerating chiral maps on surfaces with a given underlying graph

김인숙(성균관대) : Bifurcation problems for nonlinear equations

서수길(연세대) : Truncated Euler systems over imaginary quadratic fields

송홍엽(연세대) : Choi's orthogonal latin squares is at least 67 years earlier than Euler's

이창욱\*(카이스트), 박은희(카이스트), 조혜림(카이스트) : A dual iterative substructuring method with a penalty term

### <Algebra>

Reza Sharafadini\*(부산대), Mitsugu Hirasaka(부산대) : On schemes with at most three irreducible characters

Phan Thanh Toan(포항공대) : Krull dimension of power series rings over almost Dedekind domains  
 김경탁\*(부산대), Mitsugu Hirasaka(부산대) : On  $p$ -covalenced association schemes  
 김대산(서강대) : Infinite families of recursive formulas generating power moments of Kloosterman sums:  $O^+(2n, 2^r)$  case  
 김태균(광운대) : On the symmetries of  $q$ -Bernoulli polynomials  
 문은정\*(경북대), 박홍경(경북대), 임석훈(경북대) : On Genocchi numbers and polynomials  
 송석준\*(제주대), Luis Hernandez(Physics Institute(Spain, Madrid)): Dimension of the intersection of a pair of orthogonal groups

### <Analysis>

Takuya Hosokawa(고려대) : Weighted composition operator on weighted Bloch spaces  
 강보원\*(충남대), 최성규(충남대), 구남집(충남대) : On stability of dynamic equations on time scales via unified quasisimilarity  
 강정임(국가수리과학연구소) : Fixed point set of semigroups of non-expansive mappings and amenability  
 권도용(포항공대) : The natural extensions of  $\beta$ -transformations which generalize baker's transformations  
 권오상(포항공대) : Existence of multi-bump standing waves with a critical frequency for nonlinear Schrödinger equations with potentials vanishing at infinity  
 김대욱\*(부산대), 정일효(부산대) : Global existence for a nonlinear hyperbolic equation with the mixed boundary conditions  
 김명현\*(성균관대), 김재우(성균관대) : Local regularity of the Navier-Stokes equations up to the boundary  
 김연호\*(성균관대), 김인숙(성균관대) : A global bifurcation for the  $p$ -Laplacian in an unbounded domain  
 김재우\*(성균관대), 김명현(성균관대) : Local regularity of the steady state Navier-Stokes equations in five dimensions  
 김종규(경남대) : Algorithms for a new system of generalized mixed quasi-variational inclusions involving  $(A, \eta)$ -accretive mappings  
 김종호\*(국가수리과학연구소), 정순영(서강대) : Comparison principles for the  $p$ -Laplacian on nonlinear networks  
 김주명(국가수리과학연구소) : Three-space problem for the weak bounded approximation property  
 김희섭\*(경북대), 임용도(경북대) : An extended matrix exponential formula  
 박선혜(부산대) : Stabilization of hyperbolic hemivariational inequalities of viscoelasticity  
 박원길\*(국가수리과학연구소), 배재형(경희대) : A functional equation related to elliptic curves  
 박재현\*(서강대), 정순영(서강대) : Bounds of the smallest Dirichlet eigenvalue for the  $p$ -Schrödinger operators on finite networks  
 변지수\*(포항공대), 조홍래(부산대) : The explicit computations of automorphism group of special domains  
 손지애\*(충남대), 김학만(충남대) : Extension stability for the median Euler-Lagrange quadratic functional equation  
 심인보(부산대) :  $C^1$ -regularity of solutions for  $p$ -Laplacian and its application  
 안은경\*(경북대), 임용도(경북대) : Monotone and jointly homogeneous mappings on normal cones

- 안흥주\*(국가수리과학연구소), G. Zampieri(Univ. of Padova) : Global regularity of  $\bar{\partial}$  on an annulus between a Q-pseudoconvex and a P-pseudoconcave boundary
- 이병수\*(경성대), 강미광(동의대) : Generalized vector implicit complementarity problems with corresponding variational inequality problems
- 이영란\*(서강대), Dirk Hundertmark(Univ. of Illinois) : Decay estimates and smoothness for solutions of the dispersion managed non-linear Schrödinger equation
- 이영수\*(카이스트), 정순영(서강대) : Extinction properties of the heat equations with absorption on networks
- 이주리\*(충남대), 전길웅(충남대) : On the generalized stability for cubic functional equation of mixed type
- 이호수\*(경북대), 김희섭(경북대), 김세정(Louisiana State Univ.) : A converse inequality of higher-order three weighted arithmetic and geometric means of positive definite operators
- 정윤성\*(성균관대), 정순영(서강대) : Algebraic algorithms to identify point sources for partial differential equations
- 정재욱\*(동의대), 김수환(동의대) : Iterative algorithm for a new system of generalized set-valued nonlinear mixed quasi-variational-like inclusions with  $(H, \eta)$ -accretive mappings in Banach spaces
- 정택선\*(군산대), 최규홍(인하대) : Multiple solutions for a class of the systems of the nonlinear elliptic equations
- 조동현\*(경기대), 김봉진(대진대) : Analogues of conditional Fourier-Feynman transform and convolution on a function space
- 조열제\*(경상대), Yisheng Song(Henan Normal Univ.) : On Halpern's open problem
- 진범자(목포대) :  $L^1-L^1$  estimate of the Stokes flow in the half space
- 최규홍\*(인하대), 정택선(군산대) : Variational approach and the multiplicity result for a class of the systems of the suspension bridge
- 하태갑\*(부산대), 박종열(부산대) : Well-posedness and uniform decay rates for the Klein-Gordon equation with damping term and acoustic boundary conditions
- 한종민\*(한국외대), Masoud Yari(Indiana Univ.) : Dynamic bifurcation of the complex Swift-Hohenberg equation

### <Geometry>

- 김호일\*(경북대), 이창영(세종대), Hirodeki Nakajima(성균관대) : Super Heisenberg group and noncommutative super torus
- 박준식(부산외국어대) : Invariant Yang-Mills connections with Weyl structure
- 서검교(고등과학원) : Isoperimetric inequalities for soap film-like surfaces spanning nonclosed curves
- 성찬영(국가수리과학연구소) : On the nonexistence of Einstein metric on 4-manifolds
- 신용호(울산대) : On generic submanifolds with Sasakian structure of  $S^n(\frac{1}{\sqrt{2}}) \times S^n(\frac{1}{\sqrt{2}})$
- 양성덕\*(고려대), 김영욱(고려대), 고성은(건국대), 신해용(중앙대), 이형용(고려대) : A characterization of helicoids in Nil(3)
- 이승훈(영동대) : Invariant minimal unit vector fields on some Lie groups
- 이일룡(경성대) : On Douglas space with an approximate infinite series  $(\alpha, \beta)$ -metric

이현진\*(경북대), 서영진(경북대) : Real hypersurfaces of type  $B$  in complex two-plane Grassmannians related with the Reeb vector

정승달\*(제주대), Ken Richardson(Texas Christian Univ.) : Transverse conformal Killing forms and related topics

정임순\*(국가수리과학연구소), Juan de Dios Pérez(Universidad de Granada), 서영진(경북대) : Real hypersurfaces in complex two-plane Grassmannians with parallel structure Jacobi operator

조철현(서울대) : Floer theory on toric manifold

한종규(서울대) : Foliations associated with Pfaffian systems

### <Topology>

김동석(경기대) : Combinatorial webs of the representation category of the quantum Lie superalgebra  $sl(1|1)$

김정수(건국대) : Handlebody-preserving finite group actions on Haken manifolds with Heegaard genus two - II

김훈\*(카이스트), 진교택(카이스트), 전춘배(대덕대학), 장승욱(한국과학영재학교), 문상혁(한국과학영재학교), 박상현(한국과학영재학교), 송유신(한국과학영재학교) : Lattice edge number of figure-8 knot

박준미\*(충남대), 이건희(충남대) :  $C^1$ -stably inverse shadowable homoclinic classes

박희상\*(서울대), 박종일(서울대), 신동수(포항공대) : A simply connected surface of general type with  $p_g = 0$  and  $K^2 = 4$

서명수\*(경북대), 이상율(부산대) : On a presentation of knots and links and an associated link type invariant

신준국\*(충남대), 구대환(충남대) : Infra-Nilmanifolds modeled on twisted quaternionic Heisenberg group

이인숙\*(경북대), 배용주(경북대) : A matrix formula and its application to the Alexander polynomial of periodic link

이정훈(고등과학원) : On the union stabilization of two Heegaard splittings

최수영\*(카이스트), Taras Panov(Moscow State Univ.), 서동엽(카이스트) : Toric cohomological rigidity of simple polytope

최태영(국가수리과학연구소) : Limit shadowing property in differentiable dynamical systems

한상언(전북대) : Cartesian product of the universal covering property

### <Probability and Statistics>

김윤경(동신대) : The concepts of tightness for fuzzy random variables

최승희\*(한국항공대), 윤진희(연세대) : Fuzzy regression based on distribution free methods

### <Applied Mathematics>

Huimin Jing\*(Graduate Univ. of Chinese Academy of Sciences), Huai Zhang(Graduate Univ. of Chinese Academy of Sciences), Yaolin Shi(Graduate Univ. of Chinese Academy of Sciences), 김광익(포항공대) : Numerical simulation for the analysis of wave hazard in POSCO new harbor

Le Anh Tuan\*(Ninh Thuan College of Pedagogy), 이규명(부경대), Pham Huu Sach(Hanoi Institute of Mathematics) : Upper semicontinuity result for the solution mapping of a mixed parametric generalized vector quasiequilibrium problems with moving cones

강선영\*(국가수리과학연구소), 전원주(국가수리과학연구소) : An accurate numerical solution of

- Fredholm integral equation with a non-smooth kernel occurring in inverse problems of string vibration
- 권오성\*(포항공대), 권재룡(포항공대) : For the Stokes problem with mixed boundary conditions on the L-shaped domain
- 권정혜\*(동서대), 명호성(동서대), 이병국(동서대), 이준재(계명대), 윤정호(이화여자대) : Image deformation using radial basis function interpolation
- 김귀수\*(부경대), 이규명(부경대) : On  $\epsilon$ -optimality conditions for convex optimization problem
- 김문희(동명대) : Some remarks on nondifferentiable multiobjective optimization problem
- 김봉조\*(카이스트), 최건호(카이스트) : High precision numerical estimation of the largest Lyapunov exponent
- 김영표\*(포항공대), 권재룡(포항공대) : A finite element method for the edge singularity of the Laplace equation
- 김은연(국가수리과학연구소) : MULTI-K: accurate classification of microarray samples using multiple k-means clustering
- 박보람\*(서울대), 김서령(서울대), Yoshio Sano(Kyoto Univ.) : Some bounds for the competition numbers of complete multipartite graphs in terms of Latin squares
- 양성대\*(국가수리과학연구소), 권희대(인하대), 이지현(연세대) : Eigen series solutions to exact controllability problems on wave equations
- 양인석(경북대) : Robust synchronization of chaotic pendulum systems using sliding mode control
- 이경섭\*(카이스트), 최건호(카이스트) : Financial models based on Poisson distributions with conditional intensity
- 이상희(국가수리과학연구소) : Prey flock escaping behavior under a predator's attack
- 이윤희\*(포항공대), 권용훈(포항공대) : The simulation of Korea population dynamics by parameter estimations
- 이정연\*(서울대), 김석진(건국대), 김서령(서울대), Yoshio Sano(Kyoto Univ.) : Competition number of a graph  $G$  with exactly one maximal clique of size  $\geq 3$
- 이정엽\*(고등과학원), Boris Solomyak(Univ. of Washington) : The Meyer property on substitution point sets
- 장봉수(포항공대) : Effective elastic modulus of periodic composite materials
- 장현진\*(카이스트), 최건호(카이스트) :  $K$ th default time distribution and basket default swap pricing
- 전영미\*(동서대), 최남석(동서대), 이병국(동서대), 이문배(이화여자대), 윤정호(이화여자대) :  $k$ -nearest moving least square approximation using Gaussian function
- 조유영\*(부산대), 이용훈(부산대), 조경미(동서대) : A new interior point method for linear optimization based on kernel functions
- 최보경\*(부경대), 이규명(부경대) : On complexity analysis of the primal-dual interior-point method for second-order cone optimization problem
- 최형준\*(포항공대), 권재룡(포항공대) : Corner singularities for the Maxwell's equations in the concave domain
- 표재홍(강원대) : New singular function method for domain singularities
- 황성임\*(국가수리과학연구소), 이선미(건국대) : Three-dimensional localized solitary wave solutions generated a moving bump
- 황치옥\*(국가수리과학연구소), 김승연(충주대) : New directions of statistical physics in the age of

computational science: Yang-Lee zero phase transition approach for 2-D triangular antiferromagnets

#### <Mathematics for Information Sciences>

Yoshio Sano(Kyoto Univ.) : On the rank functions of  $\mathcal{H}$ -matroids

강경태(제주대) : Regular matrices and their strong preservers over semirings

강한국(국가수리과학연구소) : Considering the structures of a kind of simple graphs on the lattice  $\mathbb{Z}^n$

김대산(서강대) : Codes associated with  $O^+(2n, 2^r)$  and power moments of Kloosterman sums

김덕선\*(성균관대), 이상구(성균관대) : A new voice pattern recognition method based on SVD perturbation

김주형(국가수리과학연구소) : An orthogonality between pairs of split decompositions for a  $Q$ -polynomial distance-regular graph

박종욱(포항공대) : On a class of distance regular graph with diameter three

방세정\*(부산대), Jack Koolen(포항공대), Vincent Moulton(Univ. of East Anglia) : The Bannai-Ito conjecture

오동렬\*(국가수리과학연구소), 김현광(포항공대), 이준엽(포항공대) : Optimal codes over deletion and insertion metric

이우순(포항공대) : Algebraic properties of completely regular codes

이준엽(포항공대) : Analyses of Eulerian and Stirling numbers in terms of polytope numbers

조진환(수원대) : Entries of integral primitive matrices

주형관\*(전남대), 서승현(강원대) : Enumeration of binary matrices avoiding certain types of 2 by 2 minors

최선화(건국대) : A cyclic compartmental model approach to the nemesis of consciousness: Alzheimer's

최수학\*(포항공대), 김현광(포항공대) : The uniqueness of the optimal codes

#### <Mathematical Education>

박혜숙(서원대) : Mentoring with concrete teaching materials

양정모(한국학술진흥재단) : The difference between mathematical science and science focused on research funding and performance

이상구\*(성균관대), 함윤미(경기대) : Colonial education policy and the last 100 years of Korean mathematics

최영환(한국수학교육학회) : Teaching of mathematics in and out of school

#### <Cryptography>

강주성(국민대) : A hybrid algorithm for privacy preserving association rule mining

마대건\*(서울대), 홍진(서울대) : Success probability of the Hellman trade-Off

박정열\*(카이스트), 한상근(카이스트) : Computation of Gröbner basis of polynomials over  $F_2$  using  $F_5$  algorithm

서석충\*(고려대), 한동국(ETRI), 홍석희(고려대) : An efficient implementation of elliptic curve cryptosystems on 16-bit Tmote Sky sensor motes

엄수경\*(이화여대), 이파라(이화여대), 이향숙(이화여대) : Tate pairing computation on divisors of hyperelliptic curves

이문성(카이스트) : On cryptanalysis of the GGH cryptosystem

이주영\*(ETRI), 염용진(ETRI) : Efficient RFID authentication protocols based on pseudorandom sequence generators

한대완(ETRI) : Application of PolyBoRi and SAT-solvers to cryptanalysis

홍정대\*(서울대), 김정우(서울대), 박근수(서울대), 천정희(서울대) : ElGamal with polynomial and its applications: Set-union, E-voting

### <Number Theory>

주관교수 : 서수길(연세대)

Keiichi Gunji(포항공대) : On Siegel Eisenstein series of degree two for low weights

권도용\*(포항공대), Shigeki Akiyama(Niigata Univ.) : Constructions of Pisot and Salem numbers with flat palindromes

김대열(국가수리과학연구소) : The number of solutions for elliptic curves

박부성(고등과학원) : Simple proofs for universal binary Hermitian lattices

신동화\*(카이스트), 구자경(카이스트), 정호윤(카이스트) : On some ray class invariants over imaginary quadratic fields

오병권\*(세종대), W. K. Chan(Wesleyan Univ.) : Almost universal ternary sums of triangular numbers

임보혜(중앙대) : Generalizing a theorem of Richard Brauer

임성근(포항공대) : Several modular transformation formulae and infinite series identities from the generalized Eisenstein series

임수봉(포항공대) : Lerch sums and Jacobi theta functions(a preliminary report)

임종렬(포항공대) : Equidistribution of Jacobi forms(Preliminary report)

진석호(포항공대) : A preliminary report on the application of Jacobi Eisenstein series

최도훈(한국항공대) : Congruences for level four cusp forms

### <Representation Theory>

주관교수 : 오영탁(서강대), Alistair Savage(Univ. of Ottawa)

Alistair Savage(Univ. of Ottawa) : Moduli spaces of sheaves and the boson-fermion correspondence

Peter Tingley(Univ. of Melbourne) : Three combinatorial models for affine  $sl(n)$  crystals

권재훈\*(서울시립대), Shun-Jen Cheng(Academia Sinica) : Howe duality and Kostant type homology formula for Lie superalgebras

문동호(세종대) : Reduction formulae from the factorization theorem of Littlewood-Richardson polynomials by King, Tollu and Toumazet

이동일\*(고등과학원), 강석진(서울대), 박의용(서울대), 박형주(고등과학원) : A generalization of Castelnuovo-Mumford regularity for representations

### <Noncommutative Rings>

주관교수 : 김남균(한밭대)

김남균\*(한밭대), 홍찬용(경희대), 이양(부산대), Pace P. Nielsen(Univ. of Iowa) : The minimal prime

spectrum of rings with annihilator conditions

박상원(동아대) : Representations of quivers with finite edges

백종욱\*(경희대), 박지연(경희대) : The diameter and girth of line graphs of zero-divisor graphs

이양(부산대) : The McCoy condition on non-commutative rings

이창익(부산대) : On  $K$ -rings and related rings

전영철\*(한국과학영재학교), 김남균(한밭대), 이양(부산대) : On fully idempotent rings

한준철(부산대) : The group action in the ring of integers modulo  $n$

홍찬용\*(경희대), 김남균(한밭대), 이양(부산대) : Ore extensions of quasi-Baer rings and principally quasi-Baer rings

### <Algebraic Geometry>

주관교수 : 김영록(한국외국어대)

박의성(고려대) : On secant loci and simple linear projections of some projective varieties

송영석(카이스트) : Complexity via generic initial ideals

신동수(포항공대) : The minimal degree of plane models of double covers of smooth curves

안재만\*(공주대), 광시중(카이스트) : Projecting linear syzygies and applications

우영호(고등과학원) : Cayley-Bacharach conjecture and LPP conjecture

이남훈\*(홍익대), A. Kovalev(Univ. Cambridge) : Non-symplectic manifolds and  $G_2$ -manifolds

장준명(고등과학원) : A counterexample of Parshin's conjecture on Miyaoka-Yau inequality

전병흡(카이스트) : Class field theory of differential equations

최영욱\*(영남대), 강병련(충남대), 광시중(카이스트) : Inner projections and property  $N_{d,p}$

최인송(건국대) : Endomorphisms of hypersurfaces of Fano varieties

한강진\*(카이스트), 광시중(카이스트) : Syzygetic structures of inner projections

황동선\*(카이스트), 금종해(고등과학원) : On homological algebraic Montgomery-Yang problem

### <Harmonic Analysis and Applications>

주관교수 : 조영금(중앙대)

김준일(연세대) : Two versions of Nikodym maximal function on the Heisenberg group

양찬우(고려대) : Estimates for oscillatory strongly singular integral operators

이상혁(서울대) : Bilinear restriction estimates for hypersurfaces

이정진(포항공대) : Endpoint bilinear estimate for oscillatory integral operators related to the cone

이지훈\*(성균관대), 채동호(성균관대), 강경근(성균관대) : On the asymptotically self-similar singularities in the Euler and Navier-Stokes equations

이호\*(서울대), 하승열(서울대) : Global well posedness of the relativistic Vlasov-Yukawa system with small data

조영금\*(중앙대), 김도희(중앙대) : Kinetic potentials and uniform stability estimates for the spatially inhomogeneous Boltzmann equation with long-range interactions

채명주\*(한경대), 홍성금(조선대), 이상혁(서울대) : Ground state mass concentration in the  $L^2$  critical Hartree equation below  $H^1$

최부림(고려대) : Revisit to Carleson measures

하승열\*(서울대), Jian-Guo Liu(Univ. of Maryland) : A simple proof of the Cucker-Smale flocking dynamics and mean-field limit

홍성금(조선대) : Maximal operators associated with smooth cylinder multipliers

### <p-adic Functional Analysis and their Applications>

주관교수 : 김태균(광운대)

- 김민수\*(국가수리과학연구소), 손진우(경남대) :  $p$ -adic numbers and related  $p$ -adic integrals  
김영희\*(광운대), 유천성(한남대) : A numerical investigation on the structure of the roots of the twisted  $q$ -Euler polynomials  
김원주\*(건국대), 장이채(건국대), 김영희(광운대) : The symmetry for the distribution of twisted  $q$ -Genocchi polynomials  
박경호(경북대) : Genocchi numbers and functions associated with the basic Fourier transform  
임석훈(경북대), 문은정(경북대) :  $q$ -Euler numbers and polynomials associated with basic zeta functions

### <Applied Harmonic Analysis>

주관교수 : 권길현(카이스트)

- 장신욱\*(카이스트), 권길현(카이스트) : Average sampling on shift invariant spaces  
김래영\*(영남대), 김홍오(카이스트), Ole Christensen(Technical Univ. of Denmark) : Gabor frame generators on  $[-1, 1]$  with compactly supported duals  
김종민\*(국가수리과학연구소), 권길현(카이스트) : Multi-channel sampling in shift-invariant spaces connected with sampling of multi-band signals  
김홍오\*(카이스트), 김래영(영남대), 임재근(한경대) : Internal structure of UEP wavelet frames  
이동원(경북대) : Discrete classical multiple orthogonal polynomials and difference relations  
이재규\*(카이스트), 권길현(카이스트) : Irregular sampling on shift invariant spaces  
장수미\*(카이스트), 김홍오(카이스트), 이연주(Univ. of Wisconsin), 윤정호(이화여대) : A generalization of the polynomial interpolatory filter  
홍윤미\*(카이스트), Goetz Pfander(Jacobs Univ. Bremen) : Multichannel and irregular sampling of operators

### <Functional Analysis>

주관교수 : 지운식(충북대), 허재성(한양대)

- Torsten Ehrhardt(포항공대) : Determinant computations for some Toeplitz-Hankel matrices  
Uwe Franz\*(Université de Franche-Comté), Adam Skalski(Lancaster Univ.) : On idempotent states on quantum groups  
Fumio Hiai(Tohoku Univ.) : Orbital approach to free entropy and free pressure  
Roland Speicher(Queen's Univ.) : Resolvents and distances between operators  
김인현(인천대) : Weyl's theorem and tensor product for operators satisfying  $T^{*k}|T^2|T^k \geq T^{*k}|T|^2 T^k$   
김철준\*(제주대), 양영오(제주대) : On properties of class  $\mathcal{Q}$  and class  $\mathcal{Q}^*$  of operators  
김형준(서울대) : Hyperinvariant subspaces for quasinilpotent operators on Hilbert spaces  
박춘길(한양대) : Functional equations associated with inner product spaces  
이상훈(충남대) : A note on the 2-variable subnormal completion problem  
이우영\*(서울대), 황인성(성균관대) : Hyponormal block Toeplitz operators  
이은영\*(경북대), George Exner(Bucknell Univ.), 정일봉(경북대), 이미령(경북대) : Rank-one perturbations of weighted shifts being distinct weak-hyponormalities  
이지은\*(이화여대), 정성은(이화여대), 이미정(이화여대) : On some operators with the single-valued

extension property

이훈희\*(Univ. of Waterloo), Brian E. Forrest(Univ. of Waterloo), Ebrahim Samei(Univ. of Saskatchewan)  
: Projectivity of modules over Fourier algebras

최윤성(포항공대) : Polynomial numerical index

최창선\*(카이스트), 이근영(카이스트) : Vector measures induced by integration

#### <Inverse Problems for Imaging>

주관교수 : 강현배(인하대)

Habib Zribi(서울대) : Conductivity interface problems : Reconstruction small perturbation of an interface

김성환\*(한밭대), 우현균(삼성전자), 서진근(연세대) : On electrical capacitance tomography for visualizing the flow of a mixture of high/low conducting components

이지현\*(연세대), 전성찬(광주과기대), 서진근(연세대), 우응제(경희대) : Frequency difference EIT using a weighted voltage difference

이현대\*(인하대), 강현배(인하대), Habib Ammari(Ecole Polytechnique) : Asymptotic spectral analysis and its applications

#### <Mathematical Biology>

주관교수 : 김용국(경북대)

Yasuhisa Saito(부산대) : A well-balanced condition for multi-species coexistence in chemostat-type equations

Gul Zaman\*(부산대), 정일효(부산대), 강용환(울산대) : Optimal vaccination of communicable diseases

권희대(인하대) : Applications of optimal control theory to mathematical models of biological systems

백현기\*(경북대), 도영해(경북대), 김동석(경기대) : Dynamic complexities of a three-species Beddington-DeAngelis system with impulsive control strategy

정창도(경북대) : Cannibalism effects on a basic stage structure

#### <Modular Approach in Mathematics Education>

주관교수 : 송준호(서울시립대)

박정준\*(서울시립대), 신현혜(서울시립대), 정계선(서울시립대), 송준호(서울시립대) : Modules for education of contexts in calculus

신현혜\*(서울시립대), 박정준(서울시립대), 정계선(서울시립대), 송준호(서울시립대) : Example modules in mathematics education

정계선\*(서울시립대), 박정준(서울시립대), 신현혜(서울시립대), 송준호(서울시립대) : Figure modules in mathematics education

정명신\*(서울시립대), 민현수(서울시립대), 박인규(서울시립대), 김근범(서울시립대), 이현주(서울시립대), 장세덕(서울시립대) : Math module application in physics education

#### <Mathematical Logic and Foundations>

주관교수 : 박창균(서경대)

김병환(연세대) : The notion of Fraïssé limit as the generic structure of finite structures

박창균(서경대) : Intuitionism, constuctivism and intuitionistic logic

정주희(경북대) : Intepretations and semantic embedding