# Program for ISAAC 2015

http://www.fst.umac.mo/conference/isaac2015/index.html

3rd August–8th August, 2015 University of Macau Macao, China

# Local Organizing Committee:

Tao Qian (Chair)

C. L. Philip Chen (Honorary co-chair)

Members (in the alphabetical order)

Yang Chen

Pei Dang

Jin-Yuan Du

Kit Ian Kou

 ${\rm Min}\ {\rm Ku}$ 

Yue-Fei Wang

## Outline of the structure and venue of ISAAC 2015

The talks consist of plenary talks and invited talks. Each plenary talk lasts 60 minutes, and each invited talk lasts 30 minutes. The plenary ones will be given in the mornings and in the early afternoons from the Monday to the Friday. The rest time will be for the invited talks, lasting to the Saturday morning. There is also an evening lecture on the 4th of August.

The main lecture hall is E4-G078, where the opening and award ceremonies and the plenary lectures will be held. The lecture hall will also be occasionally used by combined–session–talks.

The lecture rooms for the invited (session) talks are: E4-1051, E4-1052, E4-3052, E4-3053, E4-3054, E4-3055, E4-3056, E4-3062, E4-3063 and E4-3064.

Coffee and tea breaks will be held on the ground floor of E4 Building. The registration desks will be there, too.

There is wireless internet available via the users name "guest1689", and the password "niyk1339".

# PROGRAM OF ISAAC 2015

# List of Plenary Speakers

Yum-Tong Siu, Harvard UniversityMonZhongcan Ouyang, ITP, CAS, ChinaMonDarren Crowdy, Imperial College LondonTueLeon Cohen, City University of New York, Hunter CollegeTueNgaiming Mok, University of Hong KongTueWinfried Sickel, University of Jena, GermanyWeeYoshinori Morimoto, Kyoto UniversityWeeVladimir Temlyakov, University of South CarollinaWeeYa-Guang Wang, Shanghai Jiaotong UniversityThuDan Virgil Voiculescu, University of California BerkeleyThuSaburou Saitoh, Gunma University, JapanThu	Alan McIntosh, Australian National University	Mon.
Zhongcan Ouyang, ITP, CAS, ChinaMonDarren Crowdy, Imperial College LondonTueLeon Cohen, City University of New York, Hunter CollegeTueNgaiming Mok, University of Hong KongTueWinfried Sickel, University of Jena, GermanyWeeYoshinori Morimoto, Kyoto UniversityWeeVladimir Temlyakov, University of South CarollinaWeeYa-Guang Wang, Shanghai Jiaotong UniversityThuDan Virgil Voiculescu, University of California BerkeleyThuSaburou Saitoh, Gunma University, JapanThu	Yum-Tong Siu, Harvard University	Mon.
Darren Crowdy, Imperial College LondonTueLeon Cohen, City University of New York, Hunter CollegeTueNgaiming Mok, University of Hong KongTueWinfried Sickel, University of Jena, GermanyWeeYoshinori Morimoto, Kyoto UniversityWeeVladimir Temlyakov, University of South CarollinaWeeYa-Guang Wang, Shanghai Jiaotong UniversityThuDan Virgil Voiculescu, University of California BerkeleyThuSaburou Saitoh, Gunma University, JapanThu	Zhongcan Ouyang, ITP, CAS, China	Mon.
Leon Cohen, City University of New York, Hunter CollegeTueNgaiming Mok, University of Hong KongTueWinfried Sickel, University of Jena, GermanyWeeYoshinori Morimoto, Kyoto UniversityWeeVladimir Temlyakov, University of South CarollinaWeeYa-Guang Wang, Shanghai Jiaotong UniversityThuDan Virgil Voiculescu, University of California BerkeleyThuSaburou Saitoh, Gunma University, JapanThu	Darren Crowdy, Imperial College London	Tue.
Ngaiming Mok, University of Hong KongTueWinfried Sickel, University of Jena, GermanyWeeYoshinori Morimoto, Kyoto UniversityWeeVladimir Temlyakov, University of South CarollinaWeeYa-Guang Wang, Shanghai Jiaotong UniversityThuDan Virgil Voiculescu, University of California BerkeleyThuSaburou Saitoh, Gunma University, JapanThu	Leon Cohen, City University of New York, Hunter College	Tue.
Winfried Sickel, University of Jena, GermanyWeatYoshinori Morimoto, Kyoto UniversityWeatVladimir Temlyakov, University of South CarollinaWeatYa-Guang Wang, Shanghai Jiaotong UniversityThuDan Virgil Voiculescu, University of California BerkeleyThuSaburou Saitoh, Gunma University, JapanThu	Ngaiming Mok, University of Hong Kong	Tue.
Yoshinori Morimoto, Kyoto UniversityWedVladimir Temlyakov, University of South CarollinaWedYa-Guang Wang, Shanghai Jiaotong UniversityThuDan Virgil Voiculescu, University of California BerkeleyThuSaburou Saitoh, Gunma University, JapanThu	Winfried Sickel, University of Jena, Germany	Wed.
Vladimir Temlyakov, University of South CarollinaWedYa-Guang Wang, Shanghai Jiaotong UniversityThuDan Virgil Voiculescu, University of California BerkeleyThuSaburou Saitoh, Gunma University, JapanThu	Yoshinori Morimoto, Kyoto University	Wed.
Ya-Guang Wang, Shanghai Jiaotong UniversityThuDan Virgil Voiculescu, University of California BerkeleyThuSaburou Saitoh, Gunma University, JapanThu	Vladimir Temlyakov, University of South Carollina	Wed.
Dan Virgil Voiculescu, University of California Berkeley Thu Saburou Saitoh, Gunma University, Japan Thu	Ya-Guang Wang, Shanghai Jiaotong University	Thu.
Saburou Saitoh, Gunma University, Japan Thu	Dan Virgil Voiculescu, University of California Berkeley	Thu.
	Saburou Saitoh, Gunma University, Japan	Thu.
Karen Yagdjian, University of Texas-Pan American Fri.	Karen Yagdjian, University of Texas-Pan American	Fri.

# List of Sessions

# Title and Organizers

1	Advances in fractional calculus and applications Organizers: C. Cattani, X. Y. Yang, F. B. M. Belgacem	Wed., Sat.
2	Analytic and harmonic function spaces and their operators Organizer: H. T. Kaptanoğu	Tue.
3	Complex–analytic methods for applied sciences Organizers: V. Mityushev, S. Rogosin	Mon., Tue.
4	Complex and functional–analytic methods for differential equations and applications Organizers: H. Begehr, J. Y. Du, H. Liu, Y. F. Wang	Tue., Wed., Fri.
5	Complex geometry	Mon., Tue., Wed., Fri.

Organizer: A. Schmitt

6	Complex variables and potential theory Organizers: T. A. Azeroglu, A. Golberg, M. Lanza de Cristoforis, S. Plaksa	Wed., Fri.
7	Functions theory of one complex variable Organizers: Y. F. Wang, W. X. Shen, H. Wulan, W. J. Yuan	Wed., Fri., Sat.
8	<ul><li>Functions theory of several complex variables</li><li>Organizers: Z. H. Chen, K. I. Kou,</li><li>M. S. Liu, X. Y. Zhou</li></ul>	Wed., Fri., Sat.
9	Generalized functions Organizers: M. Oberguggenberger, S. Pilipovic	Mon., Tue., Fri.
10	Harmonic analysis and PDEs Organizers: M. Ruzhansky, M. Sugimoto, B. X. Wang, J. Wirth	Tue., Wed., Fri.
11	Integral transforms and reproducing kernels Organizers: S. Saitoh, J. Rappoport	Mon., Wed., Fri.
12	Numerical analysis of PDEs Organizers: A. Ostermann	Fri.
13	Nonlinear partial differential equations Organizers: V. Georgiev, T. Ozawa	Mon., Tue.
14	Pseudo–differential operators Organizers: J. Toft, M. W. Wong	Mon., Tue., Fri.
15	Qualitative behavior of PDEs in fluid mechanics and related topics Organizers: Y. G. Wang, Y. C. Li, T. Yang	Mon., Tue., Wed.
16	Quaternionic and Clifford analysis Organizers: S. Bernstein, U. Kähler, I. Sabadini, F. Sommen	Mon., Tue., Wed., Fri.
17	Random matrices Organizers: Y. Chen	Wed., Fri.
18	Recent advances in sequence spaces	Mon., Tue.

4

19	Recent progress in evolution equations Organizers: M. D'Abbicco, F. Hirosawa, M. Reissig	Mon., Tue., Fri.
20	Signal and image analysis and application Organizers: Q. H. Chen, P. Dang	Tue., Wed., Fri.
21	Wavelet theory and related topics Organizers: K. Fujita, A. Morimoto	Fri.
22	Fourier analysis and approximation theory Organizers: S. Tikhonov, E. Liflyand	Tue.
23	Harmonic analysis and applications Organizers: Z. W. Fu, C. X. Miao, L. X. Yan, D. C. Yang	Fri., Sat.

Organizers: P. D. Srivastava, B. C. Tripathy

# Program at a glance by time

Monday, 3rd August	
--------------------	--

Time	Content	Venue
8:30-9:30	Registration at the ground floor of E4 Building	
9:30-10:00	Speech by Prof. Wei Zhao, Rector of University of Macau;	
	Speech by ISAAC President Prof. Luigi Rodino; and	E4-G078
	Acknowledgments by Local Organizing Committee Chair Prof. Tao Qian	
10:00-10:20	Tea break	Ground floor of E4 Building
10:20-11:20	Plenary Lecture 1 (Chaired by Tao Qian)	
	Prof. Alan McIntosh, Australian National University	
	Harmonic analysis of first order systems on Lipschitz domains	
		E4-G078
11:30-12:30	Plenary Lecture 2 (Chaired by Tao Qian)	
	Prof. Yum-Tong Siu, Harvard University	
	The past, present, and future of the theory of multiplier ideal sheaves	
12:30-14:00	Lunch break	Food Paradise
14:00-15:00	Plenary Lecture 3 (Chaired by Yang Chen)	
	Prof. Zhongcan Ouyang, ITP, The Chinese Academy of Science	
	The study of complex shapes of fluid membranes,	E4-G078
	the Helfrich variation model and new applications	
15:15-16:15	Parallel session talks	
	Session         15         19         14         11         18	
	Room E4-1051 E4-1052 E4-3052 E4-3053 E4-3054	
	Session         16         9         3         5         13	
	Room E4-3055 E4-3056 E4-3062 E4-3063 E4-3064	
16:15-16:35	Tea break	Ground floor of E4 Building
16:35-18:35	Parallel session talks	
	Session         15         19         14         11         18	
	Room E4-1051 E4-1052 E4-3052 E4-3053 E4-3054	
	Session 16 9 3 5 13	
	Room E4-3055 E4-3056 E4-3062 E4-3063 E4-3064	
ļ		
19:15 to 21:15	Welcome dinner	Fortune Inn Restaurant

Tuesday, 4th August							
Time	Content			Venue			
9:00-10:00	Plenary L Prof. Dar "Holey do and trans	ecture 4 (C ren Crowd; omains": ne form methe	E4-G078				
10:00-10:20	Tea break				\ \		Ground floor of E4 Building
10:20–11:20	Plenary L Prof. Leo: The histo:	ecture 5 (C n Cohen, C ry of noise	Chaired by City Univer	M. W. Wo sity of New	ong) v York, Hu	nter College	E4-G078
11.20 10.20	Parallel se	ession talks	5				
11:30-12:30	Session	2	19	14	22	18	
	Room	E4-1051	E4-1052	E4-3052	E4-3053	E4-3054	
			1			I]	
	Session	16	9	10	20	13	
	Room	E4-3055	E4-3056	E4-3062	E4-3063	E4-3064	
12:30-14:00	Lunch bre	eak					Food Paradise
14:00-15:00	Plenary L	ecture 6 (C	Chaired by	A. Schmitt	t)		
	Prof. Nga	iming Mok	. The Univ	versity of H	ong Kong		E4-G078
	The analy	tic continu	ation of he	olomorphic	maps		
	by means	of the Ber	gman kern	el			
15:15-16:15	Parallel se	ession talks	3				
	Session	2	19	14	22	18	
	Room	E4-1051	E4-1052	E4-3052	E4-3053	E4-3054	
	· · · · · · · · · · · · · · · · · · ·						
	Session	16	9	10	5	13	
	Room E4-3055 E4-3056 E4-3062 E4-3063 E4-3064					E4-3064	
16:15-16:35	Tea break	:					Ground floor of E4 Building
16:35-18:05	Parallel se	ession talks					
	Session	2	19	14	22	3	
	Room	E4-1051	E4-1052	E4-3052	E4-3053	E4-3054	
	Session         15         9         4         5         13						
	Room	E4-3055					
18:05-19:35	Dinner br	eak					
20:00-21:00	Special ev Prof. Elia	ening lectu s Wegert		E4-G078			
	Visual ext	ploration of					

XX7 1 1 F(1 A )	(T · )	· 1 C			· 1 >
Wednesday, 5th August	(Joint ses	sion day fe	or some	sessions	today)

Time	Content						Venue
9:00-10:00	Plenary L	ecture 7 (C					
	Prof. Win	fried Sicke	E4-G078				
	Interpolat	ion of Mor	ces				
10:00-10:20	Tea break		U				Ground floor of E4 Building
10:20-11:20	Plenary L	ecture 8 (C	Chaired by	M. Ruzhar	nsky)		
	Prof. Yosl	hinori Mori	imoto. $\tilde{Kvc}$	to Univers	itv		
	On the ex	istence and	l regularity	of solution	ns		E4-G078
	for the no	n–cutoff B	oltzmann e	quation			
				1			
11:30-12:30	Parallel se	ession talks					
	Session	15	8	17	11	7	
	Room	E4-1051	E4-1052	E4-3052	E4-3053	E4-3054	
		1		1		J	
	Session	16	6	10	20	4	
	Room	E4-3055	E4-3056	E4-3062	E4-3063	E4-3064	
12:30-14:00	Lunch bre	eak					Food Paradise
14:00-15:00	Plenary L	ecture 9 (C	Chaired by	Tao Qian)			
	Prof. Vladimir Temlyakov, University of South Carollina						E4-G078
	Greedy al	gorithms in	-type				
	inequalitie	es for Cheb					
15:15-16:15	Parallel se	ession talks					
	Session	15	8	17	11	7	
	Room	E4-1051	E4-1052	E4-3052	E4-3053	E4-3054	
	Session	16	20	10	5	4	
	Room	E4-3055	E4-3056	E4-3062	E4-3063	E4-3064	
16:15-16:35	Tea break		Ground floor of E4 Building				
16:35 - 18:35	Parallel session talks						
	Session         15         8         17         11         7						
	Room	E4-1051	E4-1052	E4-3052	E4-3053	E4-3054	
			)				
	Session	16	6	10	5	4	
	Room	E4-3055	E4-3056	E4-3062	E4-3063	E4-3064	
	·			1	1	]	

Wednesday, 5th August							
Time	Content	Venue					
18:50-22:00	ISAAC Board Activities						

Thursday, 6th August						
Time	Content	Venue				
9:00-10:00	Plenary Lecture 10 (Chaired by Luigi Rodino)					
	Prof. Ya-Guang Wang, Shanghai Jiaotong University	E4-G078				
	Stability of Prandtl boundary layers					
10:00-10:20	Tea break	Ground floor of E4 Building				
10:20-11:20	Plenary Lecture 11 (Chaired by Luigi Rodino)					
	Prof. Dan Virgil Voiculescu, University of California Berkeley					
	The bi–free extension of free probability					
		E4-G078				
11:30-12:30	Plenary Lecture 12 (Chaired by M. Reissig)					
	Prof. Saburou Saitoh, Gunma Unversity					
	A reproducing kernel theory with some general applications					
12:30-14:00	Lunch break					
After 14:00	Free time					

Time	Content					Venue
9:00-9:30	Award and Annour					
9:30-10:30	Keynote Lecture 13 Prof. Karen Yagdji Integral transform a partial differential of	E4-G078				
10:30-11:00	Tea break	-				Ground floor of E4 Building
11:00-12:30	Parallel session tallSessionRoomE4-1051	7 E4-3054				
	Session16RoomE4-3055	9 E4-3056	10 E4-3062	4 E4-3063	20 E4-3064	
12:30-14:00	Lunch break					Food Paradise
14:00-16:00	Parallel session talk	s				
	Session 12	19	14	21	7	
	Room E4-1051	E4-1052	E4-3052	E4-3053	E4-3054	
	Session 16	5	10	4	6	
	Room E4-3055	E4-3056	E4-3062	- E4-3063	E4-3064	
16:00-16:30	Tea break					Ground floor of E4 Building
16:30-18:00	Parallel session tall					
	Session 8	19	14	21	7	
	Room E4-1051	E4-3054				
	Session 9	5	10	4	17	
	Room E4-3055	E4-3056	E4-3062	E4-3063	E4-3064	

ridar	7+h	Anonet
riday	ζ (τn	A 119 11 SI

Saturday, 8th August

Time	Content						Venue
9:00-11:00	Parallel se Session Room	ession talks 1 E4-1051	23 E4-1052	8 E4-3052	11 E4-3053	7 E4-3055	
11:00-11:30	Tea break						Ground floor of E4 Building

# Who at what time and venue gives his/her talk

Time	E4-1051	E4-1052	E4-3052	E4-3053	E4-3054
15:15-15:45	R.J. Duan	A. Faminskii	B.W. Schulze	S. Saitoh & Y. Sawano	P.D. Srivastava
15:45-16:15	B.X. Fang	A. Kubo	N. Tokmadambetov	A. Zayed	A. Mikuherjee
	_			-	-
16:35-17:05	X.P. Hu	J. Wirth	J. Delgado	V. K. Tuan	B. C. Tripathy
17:05-17:35	W.X. Li	C. Garetto	A. Dasgupta	R. Oinarov	P. Das
17:35-18:05	T. Li	L. Fitriana	M. Ruzhansky	T. Matsuura & S. Saitoh	P. C. Das
18:05-18:35	Y.C. Li	F. Hirosawa	T. Lindström		A. A. Bakery

# Sessions on Monday, 3rd August

Time	E4-3055	E4-3056	E4-3062	E4-3063	E4-3064
15:15-15:45	Eelbode	J. Vindas	V. Mityushev	Mok	H. Kubo
15:45-16:15	Sabadini	D. Vučković	V. Mityushev & R. Czapla		L. Hari
16:35-17:05	Bernstein	G. Debruyne	O. Bar	Wikin	Q-Heung Choi
17:15-17:45	Chen	A. Singh	Samer & A. A. Al-Hatemi	Wandel	J. Tacksun
17:45-18:05	Kheyfits	S. Mincheva-Kamińska	P. Drygas		T. Matsuyama
18:05-18:35	Wutzig	A. Kamińki	N. Rylko		Y. Maekawa

# Sessions on Tuesday, 4th August

Time	E4-1051	E4-1052	E4-3052	E4-3053	E4-3054
11:30-12:00	Choe	M. Ghisi	Y. Sawano	B. Nurzhan	S. Debnath
12:00-12:30	Reséndis	C. Jäh	C. A. Taranto	E. Liflyand	B. Hazarika
				-	
15:15-15:45	Öztop	M. Reissig	Y.Y. Chen	S. Ham	A. J. Dutta
15:45-16:15	Nowak	W. Nunes	M. Kobayashi	K. S. S. Raani	A. Paul
16:35 - 17:05	Kaptanoğlu	D.T. Pham	M. Melgaard	N. Yerlan	A. Stolinska & M. Andrzejewska
17:05 - 17:35	Wołoszkiewicz	A. Galstyan	M. Reich	R. Humberto	A. Budziak
17:35 - 18:05	Dutta	Y. Wakasugi	R. Leandré	T. Sergey	M. Muchacki

Time	E4-3055	E4-3056	E4-3062	E4-3063	E4-3064
11:30-12:00	Barachart	M. Kunzinger	N. Bez	C. P. An	H. Takamura
12:00-12:30	Colombo	L. L. Baglini	K. Taniguchi	L. H. Yang	K. Wakasa
15:15-15:45	Ferreira	I. Melnikova	M. Sugimoto	Hwang	L. Stepien
15:45-16:15	Kähler	T. Levajković	Y. Tsutsui		M. Ohta
16:35-17:05	Miura	G. Omel'yanov	Aleksandrov	Tan	S. Machiara
17:05-17:35	Ueda	T. T. Dufera	Ospanov	Hoskins	M. Melgaard
17:35-18:05		L. Alexeyeva & G. Zakir'yanova	Muratbekov		M. Kurokiba

Sessio	ons on	Wednesday,	5th .	August
		•/ /		

Time	E4-1051	E4-1052	E4-3052	E4-3053	E4-3054
11:30-12:00	X.P. Wang	C. H. Qiu	J. F. Yao	Y. Sawano	H. Fujino
12:00-12:30	W. Xiang	C. P. Zhong	B. Gordon	B. Kanguzhin	M. Yanagishita
$\begin{array}{c} 15:15-15:45\\ 15:45-16:15\end{array}$	C. J. Xie Z. P. Xin	C. W. Liu X. Liu	K. Eugene D. Z. Liu	M. Aoyagi A. Temirkhanova	A. H. Fan J. Wang
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	T. Zhang H. J. Zhao M. G. Fei	Y. Yang W. Wang Sarmah Y. M. Liu	N. Maciej P. Bleher T. Rhrhardt D. Wang	H.Z. Zhang G.K. Zaki'yanova D. H. Cho	J. S. Liu L. W. Liao Y. Y. Kong F. N. Meng

Time	E4-3055	E4-3056	E4-3062	E4-3063	E4-3064
11:30-12:00	Raeymakers	D. Ghisa	J. Xu	H. Li	Kussainova
12:00-12:30	Janssens		D. Bhimani	Y. Z. Li	Ospanova
15:15 - 15:45	Cerejeiras	Y. M. Liu	T. Yoneda	Casagrande	Rajchel
15:45 - 16:15	De Ridder	Y. F. Li	T. Ozawa	_	Çelebi
16:35 - 17:05	Vajiac	A. Golberg	Y. F. Wu	Beck	Karaca
17:05 - 17:35	Eriksson	D. Karp	P. D'Ancona	Spinaci	Karlygash
17:35 - 18:05	Ren	L. Karp	L. F. Zhao	_	Marzabekova
18:05 - 18:35	Xie	M. Lanza de Cristoforis	V. Turunen		S. Konjik

Joint day of Sessions 9, 13,14, 19, 5th August, Wednesday

Time	E4-G078
11:30-12:00	M. W. Wong
12:00-12:30	J. Toft
$\substack{15:15-15:45\\15:45-16:15}$	M. Gobbino M. Nakamura
16:35 - 17:05	S. Pilipovic
17:05 - 17:35	S. Y. Chung
17:35 - 18:05	N. Bez
18:05 - 18:35	T. Ogawa

# Sessions on Friday, 7th August

	E4 1051	E4 1050	E4 2050	E4 9059	E4 2054
Time	E4-1051	E4-1052	E4-3052	E4-3053	E4-3054
11:00-11:30	K. I. Kou	K. Nishihara	L. Cohen	B. Golubov & S. Volosivets	W. J. Yuan
11:30-12:00	J. F. Zhu	M. A. Djaouti	G. Gupur	B. S. Kim	T. B. Cao
12:00-12:30	X. Dong	M. Ruziev	V. Catană	J. Rappoport	J. S. Xu
	_				
14:00-14:30	A. Ostermann	L. Karp	G. Pfander	A. Morimoto	J. M. Qi
14:30-15:00	L. Einkemmer	X. Lu	D. Walnut	N. Ikawa	G. W. Zhang
15:00-15:30	H. Mena	Y. Liu	V. Turunen	T. Noi	Y. Y. Huo
15:30-16:00	K. Shakenov	H. Nakazawa	G. Garello	K. Fujita	L. P. Chen
16:30-17:00	X. Z. Huang	S. E. Rebiai	Ervin Sejdić	K. Mizohata	Z. B. Huang
17:00-17:30	X. D. Chen	M. D'Abbicco	H. M. Zhu	K. Fujinoki	Y. M. Liu
17:30-18:00	M. S. Liu	S. Yoshikawa			X. M. Li

Time	E4-3055	E4-3056	E4-3062	E4-3063	E4-3064
11:00-11:30	B. L. Zhang	H. Vernaeve	J. Wirth	Serovajsky	M. Piekarczyk
11:30-12:00		A. Debrouwere	V. Vasilyev	Raikhan	R. R. Lin
12:00-12:30	Z. X. Zhang	A. Lecke	C. H. Chen	Rajabov	
14:00-14:30	Grigoriev	Sage	H. Yamane	Rajabova	R. Pukhtaievych
14:30-15:00	Di Teodoro	-	D. Suragen	Vanegas	V. Shpakivskyi
15:00-15:30	Alexeyeva	Liu	I. Trooshin	Wang	P. T. W. Ng
15:30 - 16:00			Obidjon Abdullaev	Lin	R. Salimov
16:30-17:00	Y. Y. Yang	Jahnke	R. Akylzhanov	Tungatarov	L. Zhang
17:00-17:30	M. Schwarz	Bogatyrev		Begehr	A. D. Asmaa
17:30-18:00	M. Oberguggenberger			X. H. Ji	

# Sessions on Saturday, 8th August

Time	E4-1051	E4-1052	E4-3052	E4-3053	E4-3055
9:00-9:30	Talks in Session 1	Talks in Session 23	J. M. Liu	Y. Mo	W. Mi
9:30-10:00			C. M. Zou	W. X. Mai	C. F. Wu
10:00 - 10:30			X. X. Hu		
10:30-11:00			D. Cheng		

#### **Detailed program of Sessions**

Session 1

5th August, Wednesday
Room E4-3064
18:05–18:35: Sanja Konjik, Vibrations of an elastic rod on a viscoelastic foundation of complex fractional Kelvin–Voigt type

Session 2

4th August, Tuesday Room E4-1501 11:30–12:00: Boo Rim Choe, Composition operators induced by linear fractional maps over the ball 12:00–12:30: Lino F. Reséndis O., Bergman projection from  $L^p(\mathbb{D}, dA_q)$  on the weighted Bergman space  ${}_{s}\mathcal{A}^{p}_{q}$ 15:15–15:45: Serap Öztop, Minimal Segal algebra in the Figà-Talamanca–Herz algebra 15:45–16:15: Maria Nowak, De Branges–Rovnyak spaces and generalized Dirichlet spaces 16:35–17:05: H. Turgay Kaptanoğlu, Three characteristics of Dirichlet spaces 17:05–17:35: Magdalena Wołoszkiewicz, Univalency of convolutions of harmonic mappings 17:35–18:05: Tarini Kumar Dutta, Hermitian operators and their norms in the projective tensor products of Banach algebras and structure C\*–algebra

3rd August, Monday Room E4-3062

**15:15–15:45**: Vladimir Mityushev,  $\mathbb{R}$ -linear problem with random inclusions and the generalized method of Schwarz

15:45–16:15: Roman Czapla and Vladimir Mityushev,  $\mathbb{R}$ –linear problem captures collective behavior of bacteria

16:35–17:05: Olaf Bar, A fast algorithm to determine the flux around closely spaced non–overlapping disks

17:05–17:35: Samer and A. A. Al–Hatemi, A boundary integral method with the generalized Neumann kernel and mixed DN problem in multiply connected regions

14

17:35–18:05: Piotr Drygaś, Effective elastic properties of composite material 18:05–18:35: Natalia Rylko, Boundary effects for  $\mathbb{R}$ -linear problems

# 4th August, Tuesday Room E4-3054

16:35–17:05: Anna Stolinska and Magdalena Andrzejewska, Analysis of the strategy used to solve algorithmic problem–a case study based on eye–tracking research

17:05–17:35: Alfred Budziak, Distributed computing in Pgi and LAM environment 17:35–18:05: Muchacki Mateusz, Image processing algorithms in different areas of science

#### Session 4

## 4th August, Tuesday Room E4-3062

16:35–17:05: A. G. Aleksandrov, Logarithmic differential forms and holonomic *D*-modules 17:05–17:35: K. N. Ospanov, Approximate property of solution of second order differential equation with unbounded drift coefficient

17:35–18:05: Musakan Muratbekov, On the existence of the resolvent and the discreteness of the spectrum of Schrödinger operator with parameter changes sign

## 5th August, Wednesday

#### Room E4-3064

**11:30–12:00**: Leili Kussainova, On approximate characteristics of the resolvent of differential operator with complex–valued variable coefficients

12:00–12:30: Ademi Ospanova, Two-sided estimates of approximative numbers of a differential embedding operator

15:15–15:45: Kazimierz Rajchel, New solvable potentials with bound state spectrum

15:45–16:15: A. Okay Celebi, Schwarz problem for higher–order linear equations in a poly–disc

16:35–17:05: Bahriye Karaca, Boundary value problems in a poly-disc

17:05–17:35: Karlygash Nurtazina, Source Identification for the heat equation with memory on graphs

17:35–18:05: Sanja Konjik, Vibrations of an elastic rod on a viscoelastic foundation of complex fractional Kelvin-Voigt type

## 7th August, Friday

# Room E4-3063

**11:00–11:30**: S. Serovajsky, Identification of the nonlinear differential system for the bacteria population under antibiotics influence

11:30–12:00: Madi Raikhan, The correctness of some multi–point boundary value problems

**12:00–12:30**: Nusrat Rajabov, Integral representation of the manifold solution for new class of the Volterra type integral equation with a boundary singularity in kernels for odd power

14:00–14:30: Lutfiya Rajabova, To theory one class of two–dimensional Volterra type integral equation with super singularity and weakly singularity in strip

14:30–15:00: Judith Vanegas, Operators associated to the space of generalized analytic functions in elliptic complex numbers

**15:00–15:30**: Yufeng Wang, A note of Riemann problems for single–periodic poly–analytic functions

15:30–16:00: Juan Lin, Stability of welding problem with perturbations

**16:30–17:00**: Aliaskar Tungatarov, Cauchy problem for some nonlinear system of n order ordinary differential equations

17:00-17:30: Heinrich Begehr, Green functions for hyperbolic strips

17:30–18:00: Xinhua Ji, A research plan on biological mathematics

Session 5

#### 3rd August, Monday

Room E4-3063

15:15–15:45: Ngaiming Mok, Analytic continuation of germs of complex submanifolds on uniruled projective manifolds inheriting geometric substructures

16:45–17:05: Graeme Wilkin, Morse theory on singular spaces

17:05–17:35: Malte Wandel, Induced automorphisms on Hyperkähler Manifolds

## 4th August, Tuesday

Room E4-3063

 $15{:}15{-}15{:}45{:}$  Jun–Muk Hwang, Webs of algebraic curves

16:35–17:05: Sheng–Li Tan, Chern numbers and algebraic integrability of a holomorphic foliation

17:05–17:35: Victoria Hoskins, Algebraic symplectic varieties via non–reductive geometric invariant theory

## 5th August, Wednesday Room E4-3063

**15:15–15:45**: Cinzia Casagrande, Parabolic vector bundles on  $\mathbb{P}^1$  and the variety of linear spaces contained in two odd-dimensional quadrics

16:35–17:05: Nikolai Beck, Principal bundles with local decorations

17:05–17:35: Marco Spinaci, Maximal holomorphic representations of Kähler groups

# 7th August, Friday

# Room E4-3056

14:00–14:30: Daniel S. Sage, Minimal K-types for flat G-bundles, moduli spaces, and isomonodromy

 $14{:}30{-}15{:}00{:}$  Wenfei Liu, Automorphisms of surfaces of general type acting trivially on cohomology

16:30-17:00: Priska Jahnke, Sub-manifolds with splitting tangent sequence

17:00-17:30: Andrei Bogatyrev, Period mappings: combinatorial approach

## Session 6

5th August, Wednesday
Room E4-3056
11:30–12:00: Dorin Ghisa, Survey of the fundamental domains method for analytic functions

16:35–17:05: Anatoly Golberg, On injectivity radius and absolute continuity of generalized quasiisometries in higher dimensions

**17:05–17:35**: Dmitrii Karp, New identities for trigonometric and hyper–geometric functions from expansions of G-function

17:35–18:05: Lavi Karp, Asymptotic properties of unbounded quadrature domains in the plane

18:05–18:35: Massimo Lanza de Cristoforis, A regularization property of the double layer potential

# 7th August, Friday Room E4-3064

14:00–14:30: Roman Pukhtaievych, Monogenic functions in a finite–dimensional semi–simple commutative algebra

14:30–15:00: Vitalii Shpakivskyi, Monogenic functions in finite–dimensional commutative associative algebras

15:00–15:30: Patrick Tuen Wai Ng, On finite Blaschke products sharing pre–image of connected compact sets

**15:30–16:00**: Ruslan Salimov, Local behavior of mappings defined by their distributional derivatives

Session 7

5th August, Wednesday Room E4-3054 18

**11:30–12:00**: Hiroki Fujino, On the classification of planes with countable marked points up to quasiconformal equivalence

**12:00–12:30**: Masahiro Yanagishita, Coincidence of Teichmüller and Kobabayashi hyperbolic distances on p–integrable Teichmüller spaces

15:15–15:45: Aihua Fan, Divergence of ergodic Hilbert transform

 $15{:}45{-}16{:}15{:}$  Jun Wang, Hausdorff measure of hairs without endpoints in the exponential family

16:35–17:05: Jingsong Liu, Deformation of circle patterns and its applications

17:05–17:35: Liangwen Liao, Complex differential equations and their applications

17:35–18:05: Yinying Kong, The growth of Laplace–Stieltjes transforms

18:05–18:35: Fanning Meng, The minimal cycles over Brieskorn complete intersection surface singularities

## 7th August, Friday

## Room E4-3054

11:00-11:30: Wenjun Yuan, Further results on meromorphic functions that share a set with their derivatives

11:30–12:00: Tingbin Cao, Recent result on the Bruck conjecture

12:00–12:30: Jingshi Xu, Variable integral exponent Besov and Triebel–Lizorkin spaces associated with non–negative self–adjoint operators

14:00–14:30: Jianming Qi, Hyper–order and order of meromorphic function sharing functions and some uniqueness problems

 $14{:}30{-}15{:}00{:}$  Guowei Zhang, Applications of complex dynamical theory in the complex differential equations

15:00-15:30: Yingying Huo, Branch points of some algebroid functions

15:30–16:00: Lüping Chen, Singular integral and the integro-differential equations

16:30–17:00: Zhibo Huang, Meromorphic solutions of complex difference equations of Malmquist type

17:00–17:30: Yongmin Liu, On a Stevic–Sharma operator from Hardy spaces to the logarithmic Bloch spaces

17:30–18:00: Xiaomin Li, Remarks on value sharing of certain differential polynomials of meromorphic functions

8th August, Saturday Room E4-3055

**9:00–9:30**: Wen Mi, A complex method for poles estimation of linear systems **9:30–10:00**: Chengfa Wu, Hayman's conjecture on factorizable algebraic ODEs

Session 8

5th August, Wednesday Room E4-1052

11:30–12:00: Chunhui Qiu, Vanishing theorems and Hodge theorems on complex Finsler holomorphic vector bundles

12:00–12:30: Chunping Zhong, On unitary invariant complex Finsler metrics

15:15–15:45: Congwen Liu, Some integrals over the Siegel upper half-space

**15:45–16:15**: Xu Liu, On the equivalence between local and global existence of complete Kähler metrics with pluri–subharmonic potentials

16:35–17:05: Yan Yang, Phase derivatives of monogenic signals and its applications In higher dimensional signal analysis

17:05–17:35: Wei Wang, On spherical quaternionic contact manifolds and convex cocompact subgroup of Sp(n+1,1)

17:35–18:05: Hemanta Kr. Sarmah, Homoclinic bifurcation in a two dimensional equation

7th August, Friday

Room E4-1051

11:00–11:30: K. I. Kou, Quaternion linear canonical transform and applications

11:30–12:00: Jian-Feng Zhu, Schwarz–pick lemma and quasiconformality on planar harmonic mappings

12:00–12:30: Xin Dong, Boundary asymptotics of the relative Bergman kernel metric

16:30–17:00: Xinzhong Huang, On the harmonic quasi–conformal mappings and related extremal problems

17:00-17:30: Xingdi Chen, Weighted harmonic mappings in the unit disk

17:30-18:00: Mingsheng Liu, On the biholomorphic convex mappings of order alpha

8th August, Saturday Room E4-3052

9:00–9:30: Junning Liu, Outer preserving operators on Hardy spaces

**9:30–10:00**: Cuiming Zou, Quaternion energy concentration problem associated with two–sided quaternion Fourier transform

10:00–10:30: Xiaoxiao Hu, Inversion theorems of Quaternion Fourier transforms and Quaternion linear canonical transforms

**10:30–11:00**: Dong Cheng, Sampling by Quaternion reproducing kernel Hilbert space embedding

Session 9

## 3rd August, Monday Room E4-3056

15:15–15:45: Jasson Vindas, Translation–invariant spaces of ultradistributions and some of their applications

**15:45–16:15**: Dorde Vučković, Ultradistributional boundary values of harmonic functions on the sphere

16:35–17:05: Gregory Debruyne, A functional-analytic view on the Wiener-Ikehara theorem

17:05–17:35: Abhishek Singh, Wavelet transform of Beurling-Bjrck type ultradistributions

 $\label{eq:17:35-18:05: Svetlana Mincheva-Kamińska, The convolution of Roumieu ultradistributions in sequential approach$ 

18:05–18:35: Andrzej Kamiński, On the Florencio-Paúl-Virués diagonal theorem

# 4th August, Tuesday

## Room E4-3056

11:30–12:00: Michael Kunzinger, Generalized smooth functions

 $12{:}00{-}12{:}30{:}$ Lorenzo Luperi Baglini, A fixed–point iteration method for arbitrary generalized ODE

**15:15–15:45**: Irina Melnikova, Construction of generalized solutions to infinite dimensional stochastic problems

15:45–16:15: Tijana Levajković, Optimal control for stochastic evolution equations

 $16:35-17:05: \ {\rm Georgy\ Omel'yanov,\ Interaction\ of\ solitary\ waves\ for\ essentially\ non-integrable\ equations.\ Asymptotic\ approach$ 

17:05–17:35: Tamirat Temesgen Dufera, Analysis of boundary–domain integral equations for Neumann BVP with variable coefficient in 2D

17:35–18:05: Lyudmila Alexeyeva and Gulmira Zakir'yanova, Generalized functions method for solving the nonstationary boundary value problems for strictly hyperbolic systems with second order derivatives

# 7th August, Friday

Room E4-3056

**11:00–11:30**: Hans Vernaeve, Microlocal analysis in Colombeau algebras based on generalized points and generalized directions

**11:30–12:00**: Andreas Debrouwere, Optimal embeddings of ultradistributions into Colombeau type algebras

**12:00–12:30**: Andreas Lecke, Distributional analysis of geodesics in nonexpanding impulsive gravitational waves

7th August, Friday Room E4-3055

16:30–17:00: Yunyun Yang, Some subtleties in the relationships among heat kernel invariants, eigenvalue distributions, and quantum vacuum energy

17:00–17:30: Martin Schwarz, Decomposition of first order  $\Psi$ DO equations using Egorov's theorem

17:30–18:00: Michael Oberguggenberger, Existence and regularity of Colombeau solutions to hyperbolic equations

#### Session 10

# 4th August, Tuesday

Room E4-3062

11:30–12:00: Neal Bez, Consequences of the Funk–Hecke theorem for smoothing and trace estimates

12:00–12:30: Koichi Taniguchi,  $L_p$  mapping properties for Schrödinger operators

15:15–15:45: Mitsuru Sugimoto, Global regularity properties of Fourier integral operators

15:45–16:15: Yohei Tsutsui, Div-curl lemma with critical power weights in dimension three

## 5th August, Wednesday Room E4-3062

11:30–12:00: Jiang Xu, Optimal decay estimates on the framework of Besov spaces for hyperbolic systems with degenerate dissipation

12:00–12:30: Divyang Bhimani, Composition operators on modulation spaces and nonlinear dispersive equations

15:15–15:45: Tsuyoshi Yoneda, Loss of continuity of the solution map for the Euler equations using large Lagrangian deformation

15:45–16:15: Tohru Ozawa, Quadratic interactions in systems of dispersive equations

16:35–17:05: Yifei Wu, On stability of solitary waves for derivative Schrödinger equation

17:05–17:35: Piero D'Ancona, Global existence of small equivariant wave maps on rotationally symmetric manifolds

17:35–18:05: Lifeng Zhao, Global well–posedness and scattering for nonlinear Schrödinger equations on manifolds

18:05–18:35: Ville Turunen, Pseudo–differential quantizations in time–frequency analysis

#### 7th August, Friday

#### Room E4-3062

11:00–11:30: Jens Wirth, Operators and symmetries

11:30–12:00: Vladimir Vasilyev, On boundary value problems for non-smooth manifolds

12:00–12:30: Chengchun Hao, Well–posedness for a multi–dimensional viscous liquid–gas two–phase ow model

14:00–14:30: Hideshi Yamane, Asymptotics for the defocusing integrable discrete nonlinear Schrödinger equation

14:30-15:00: Durvudkhan Suragan, Isoperimetric inequalities for Schatten norms of poly-harmonic Newton potentials

15:00–15:30: Igor Trooshin, Scattering on graphs

**15:30–16:00**: Obidjon Abdullaev, Some problems for the loaded integro–differential equation in double–connected domain

**16:30–17:00**: Rauan Akylzhanov, Hardy–Littlewood, Hausdorff–Young-Paley inequalities, and  $L_p-L_q$  Fourier multipliers on compact homogeneous manifolds

Session 11

3rd August, Monday Room E4-3053

15:15–15:45: Saburou Saitoh and Yoshihiro Sawano, What are reproducing kernels? Generalized reproducing kernels and generalized delta functions

**15:45–16:15**: Ahmed Zayed, Reproducing–kernel Hilbert space for the special affine Fourier transform

16:35–17:05: Vu Kim Tuan, Inverse heat equation

17:05–17:35: Ryskul Oinarov, Boundedness and compactness of the integral operators in weighted Sobolev space

17:35–18:05: Tsutomu Matsuura and Saburou Saitoh, General integral transforms by the concept of generalized reproducing kernels

## 5th August, Wednesday

Room E4-3053

11:30–12:00: Yoshihiro Sawano, Pasting reproducing kernel Hilbert spaces

12:00–12:30: Baltabek Kanguzhin, On Ionkin integral transform

15:15–15:45: Miki Aoyagi, Learning coefficients and reproducing of true probability functions in learning system

15:45–16:15: Ainur Temirkhanova, Weighted inequalities for a class of matrix operators

16:35–17:05: Haizhang Zhang, Vector–valued reproducing kernel Banach spaces with the  $l_1$ –norm and sparse multi–task learning

17:05-17:35: G. K. Zaki'yanova, Fundamental solutions of hyperbolic system of second order for N=2, and their graphical representations

17:35–18:05: Dong Hyun Cho, A change scale formula for a conditional expectation with drift over generalized Wiener paths

7th August, Friday Room E4-3053 **11:00–11:30**: Boris Golubov and Sergey Volosivets, Integrability and uniform convergence of multiplicative Fourier transforms

11:30–12:00: Byoung Soo Kim, Some properties of Fourier–Feynman transform on Wiener space

12:00–12:30: Juri Rappoport, On some applications of Kontorovitch–Lebedev transforms

# 8th August, Saturday

Room E4-3053

**9:00–9:30**: Yan Mo and Tao Qian, Support vector machine adapted Tikhonov regularization method to solve Dirichlet problem

**9:30–10:00**: Weixiong Mai and Tao Qian, Aveiro method in reproducing kernel Hilbert spaces under complete dictionary with applications

Session 12

7th August, Friday Room E4-1051

14:00–14:30: Alexander Ostermann, Operator theory in splitting methods

14:30–15:00: Hermann Mena, Andreas Kofler and Alexander Ostermann, Splitting methods for stochastic differential equations

**15:00–15:30**: Lukas Einkemmer, Convergence theory for operator splitting of Vlasov–type equations

15:30–16:00: Shakenov Kanat, Numerical solutions of Navier–Stokes equations

Session 13

3rd August, Monday

Room E4-3064

15:15–15:45: Hideo Kubo, On the local smoothing for the Dirac equation

15:45–16:15: Lysianne Hari, Propagation of coherent states

16:35–17:05: Q-Heung Choi, Multiple solutions for a class of the cooperative elliptic systems with subcritical Sobolev exponents

17:05–17:35: Jung Tacksun, Variational result for a class of square growth nonlinear elliptic systems

17:35–18:05: Tokio Matsuyama, Gevrey class solutions to the Kirchhoff equation

18:05–18:35: Yasunori Maekawa, On stability of steady circular flows in a two–dimensional exterior domain

# 4th August, Tuesday Room E4-3064

**11:30–12:00**: Hiroyuki Takamura, Improved Kato's lemma on ordinary differential inequality and its application to semi–linear wave equations

12:00–12:30: Kyouhei Wakasa, The lifespan of solutions to wave equations with weighted nonlinear terms in one space dimension

15:15–15:45: Lukasz Stepien, On some exact solutions for certain model in classical nonlinear field theory

15:45–16:15: Masahito Ohta, Stability of standing waves for a system of nonlinear Schrödinger equations with cubic nonlinearity

16:35–17:05: Shuji Machihara, Ill-posed results for the 1d Dirac-Klein-Gordon system

17:05–17:35: Michael Melgaard, Weakly coupled semi–linear nonlinear elliptic PDEs with nonlocal operators

17:35–18:05: Masaki Kurokiba, Blowing up for a solution to system of the drift–diffusion equations in three dimensions

# Session 14

3rd August, Monday

Room E4-3052

15:15–15:45: Bert-Wolfgang Schulze, Ellipticity of APS-type on manifolds with edge

 ${\bf 15:} {\bf 45-16:} {\bf 15:} \ {\rm Niyaz} \ {\rm Tokmadambetov}, \ {\rm Pseudo-differential operators induced by boundary value problems}$ 

16:35–17:05: Julio Delgado, Schatten classes on compact manifolds

17:05–17:35: Aparajita Dasgupta, Gohberg Lemma, compactness and essential spectrum of operators on compact Lie groups

17:35–18:05: Michael Ruzhansky

 $18{:}05{-}18{:}35{:}$  Torsten Lindström, Detecting chaos requires careful analysis of nearly periodic data

## 4th August, Tuesday

Room E4-3052

11:30–12:00: Yoshihiro Sawano, A phase decomposition formula

12:00–12:30: Chiara Alba Taranto, Sub–Laplacian gevrey spaces

 $15:15-15:45: \ {\it Yuanyuan \ Chen, \ Boundedness \ of \ Gevrey \ and \ Gelfand-Shilov \ kernels \ of \ positive \ semi-definite \ operators$ 

15:45–16:15: Masaharu Kobayashi, Modulation spaces and Schrödinger equations

**16:35–17:05**: Michael Melgaard, Existence and approximation of resonances for perturbed Dirac operators

17:05-17:35: Maximilian Reich, A non–analytic superposition result on gevrey–modulation spaces

17:35–18:05: Rémi Leandré, Wentzel–Freidlin estimates for a class of Lévy generator of big order

#### 7th August, Friday Room E4-3052

11:00–11:30: Leon Cohen, Are there pseudo–differential operators and wave functions in standard probability theory?

11:30–12:00: Geni Gupur, Advances in queueing models' research

**12:00–12:30**: Viorel Catană, Abelian and Tauberian results for one–dimensional Stockwell transforms and  $L_p$ -boundedness of multilinear Stockwell transforms

14:00–14:30: Götz Pfander, Boundedness of multilinear pseudo–differential operators on modulation spaces

14:30–15:00: David Walnut, Sampling theory for pseudo-differential operators

15:00–15:30: Ville Turunen, Born–Jordan time–frequency analysis

15:30-16:00: Gianluca Garello, Gabor frames and pseudo-differential operators

16:30–17:00: Ervin Sejdić, An overview of the Stockwell transform: theory and applications

17:00–17:30: Hongmei Zhu, Visualization of complex-valued time-frequency representations

# Session 15

3rd August, Monday Room E4-1051

15:15–15:45: Renjun Duan, Time–periodic solutions of the Vlasov–Poisson–Fokker–Planck system

15:45–16:15: Beixiang Fang, Global stability of E–H type regular refraction of shocks on the interface between two media

16:35–17:05: Xianpeng Hu, Magnetohydrodynamic fluids with zero magnetic diffusivity

17:05–17:35: Weixi Li, Boundary layer analysis for the fast horizontal rotating fluids

17:35–18:05: Tong Li, Qualitative analysis of some PDE models of traffic flow

18:05–18:35: Yachun Li, Local existence and singularity formation of classical solutions to the compressible isentropic Navier–Stokes equations with degenerate viscosities

# 4th August, Tuesday

Room E4-3055

**16:35–17:05**: Hideyuki Miura, Remark on single exponential bound of the vorticity gradient for the two–dimensional Euler flow around a corner

17:05–17:35: Yoshihiro Ueda, Dissipative structure of regularity–loss type for some physical problems

5th August, Wednesday Room E4-1051

11:30–12:00: Xiao-Ping Wang, Analysis of contact angle hysteresis

12:00–12:30: Wei Xiang, Convexity of shocks in the self–similar coordinates

15:15–15:45: Chunjing Xie, The well/ill–posedness of compressible Euler system with source terms

15:45–16:15: Zhouping Xin

16:35–17:05: Ting Zhang, 3D axisymmetric Navier–Stokes equations

17:05–17:35: Huijiang Zhao, THE Vlasov–Maxwell–Boltzamnn system near Maxwellans in the whole space cutoff potentials

17:35–18:05: Minggang Fei, Blow–up criterion and global existence for the hall–MHD

#### Session 16

3rd August, Monday

Room E4-3055

15:15–15:45: Eelbode, Quaternionic Hermitean Clifford Analysis

15:45–16:15: Sabadini, On the Dirac complex of several operators

16:35–17:05: Bernstein, An introduction to kernel-based frames in Clifford analysis

17:05–17:35: Chen, A frame theory of Hardy spaces with the quaternionic and the Clifford algebra settings

17:35–18:05: Alexander Kheyfits, M. Riesz theorem on conjugate harmonic functions for octonionic monogenic functions

18:05–18:35: Wutzig, Reproducing kernels of spherical monogenics

## 4th August, Tuesday

Room E4-3055

11:30–12:00: Barachart, Hardy–Hodge decomposition on manifolds

12:00–12:30: Colombo, Quaternionic groups and semi-groups of operators

15:15–15:45: Ferreira, Eigenfunctions and fundamental solutions for fractional Laplace and Dirac operators

15:45–16:15: Kähler, Fractional Clifford analysis

5th August, Wednesday Room E4-3055 11:30–12:00: Raeymakers, Polynomial solutions for higher spin Dirac operators 12:00–12:30: Janssens, On a simplicial generalisation of zonal functions

15:15–15:45: Cerejeiras, Discrete Hardy spaces in connection with Riemann boundary value problems

**15:45–16:15**: De Ridder,  $\mathfrak{so}(m)$ -representations in discrete Clifford analysis

16:35–17:05: Vajiac, Cocktail geometry: a new approach to combinatorial geometry

17:05–17:35: Eriksson, Quaternionic hyperbolic function theory

17:35–18:05: Ren, Analysis of k–Cauchy–Fueter operators

18:05–18:35: Yonghong Xie, k-hypergenic functions and Clifford Möbius transformations

7th August, Friday

Room E4-3055

11:00–11:30: Binlin Zhang, Nonlinear A–Dirac equations with variable growth

12:00–12:30: Zhongxiang Zhang, Some integral representations over plane and the Schwarz lemma in Clifford analysis

14:00–14:30: Grigoriev, Three-dimensional analogue of the Kolosov-Muskhelishvili formulae

14:30–15:00: Di Teodoro, Fundamental solution for a no constant weighted Cauchy–Riemann operator in a Clifford algebras

15:00–15:30: Alexeyeva

Session 17

5th August, Wednesday

Room E4-3052

11:30–12:00: Jiangfeng Yao, CLT for random sesquilinear forms and its applications to spiked sample co–variance matrices

12:00–12:30: Gordon Blower, On tau functions arising from linear systems

15:15–15:45: Eugene Kanzieper, What is the probability that a large random matrix has no real eigenvalues?

15:45–16:15: Dang-Zheng Liu, Phase transition of singular values for products of complex Ginibre matrices with a source

16:35–17:05: Maciej A. Nowak, Dysonian Dynamics in the Ginibre Ensemble

17:05–17:35: Torsten Ehrhardt, Asymptotics of a determinant related to the real Ginibre ensemble

17:35–18:05: Dong Wang, Non–intersecting Brownian motions with different boundary conditions

7th August, Friday Room E4-3064 16:30–17:00: Lun Zhang, Universality in the products of Ginibre random matrices  $17{:}00{-}17{:}30{:}$  Asmaan Al-Dubiban, Solutions and perturbation analysis of a nonlinear matrix equation

## Session 18

3rd August, Monday

Room E4-3054

15:15–15:45: P. D. Srivastava, Some results on operator ideals and geometric properties of generalized Musielak–Orlicz sequence space

**15:45–16:15**: Anjan Mukherjee, Intuitionistic fuzzy soft multi sequence in intuitionistic fuzzy soft multi topological spaces

16:35–17:05: B.C. Tripathy, On Rate of Convergence of Sequences

17:05–17:35: Pratulananda Das, On convergent and Cauchy functions using two ideals

17:35–18:05: Paritosh Chandra Das, Studies on bounded difference sequence space,  $l_{\infty}(\Delta)$  with respect to statistical metric

18:05–18:35: Awad. A. Bakery, Mappings of Orlicz type

4th August, Tuesday

Room E4-3054

11:30–12:00: Shyamal Debnath, Rough Convergence in metric spaces

12:00–12:30: Bipan Hazarika, Arithmetic continuity

**15:15–15:45**: Amar Jyoti Dutta, Studies on the class of p–absolutely summable sequence  $l^i(p)$  of interval number

15:45–16:15: Avinoy Paul, On some new paranormed sequence spaces defined by the matrix

Session 19

3rd August, Monday Room E4-1052

15:15–15:45: Andrei Faminskii, On Zakharov–Kuznetsov equation on the plane and in the space

**15:45–16:15**: Akisato Kubo, Nonlinear evolution equations and application to mathematical models

16:35–17:05: Jens Wirth, On t-dependent hyperbolic systems

 $17:05-17:35: \ Claudia \ Garetto, \ Hyperbolic \ equations \ and \ systems \ with \ non-regular \ coefficients$ 

17:35-18:05: Laila Fitriana, Wave equation with time dependent propagation speed asymptotically monotone functions

**18:05–18:35**: Fumihiko Hirosawa, On the energy estimates for the wave equations with decaying propagation speed

# 4th August, Tuesday

# Room E4-1052

11:30–12:00: Marina Ghisi, Decay rates for solutions of semi–linear parabolic equations

12:00-12:30: Christian Jäh, Conditional stability for backward-parabolic equations

15:15–15:45: Michael Reissig, Recent progress for semi-linear damped-evolution models

**15:45–16:15**: Nunes do Nascimento Wanderley and Hirosawa Fumihiko, Wave models with structural properties of the time–dependent potential

16:35–17:05: Pham Trieu Duong, The external damping problems with general powers of the Laplacian

17:05–17:35: Anahit Galstyan, Semi-linear hyperbolic equations in de sitter spacetime

17:35–18:05: Yuta Wakasugi, A remark on the asymptotic prole of solutions to the damped wave equation with variable coefficients

# 7th August, Friday

## Room E4-1052

**11:00–11:30**: Kenji Nishihara, Critical exponents for the Cauchy problem to weakly coupled system of wave equations with space or time dependent damping

**11:30–12:00**: Mohammed Djaouti Abdelhamid, Semi–linear systems of weakly coupled classical waves

12:00-12:30: M. Ruziev

14:00–14:30: Lavi Karp, On the Euler–Poisson equations

 $14{:}30{-}15{:}00{:}$ Xiaojun Lu, David Yang Gao, Multiple solutions for phase transition problems in higher dimensions

15:00–15:30: Yan Liu, Models of thermo-diffusion in 1d

**15:30–16:00**: Makoto Nakamura, The Cauchy problem for nonlinear complex Ginzburg–Landau equations

16:30–17:00: B. Aksas and S. E. Rebiai, Stabilization of the fourth order Schrödinger equation

 $17{:}00{-}17{:}30{:}$  Marcello D'Abbicco, Strichartz estimates for the Germain–Lagrange equation with nonlinear memory

17:30–18:00: Shuji Yoshikawa, Singular limits in the Cauchy problem for the damped extensible beam equation

Session 20

4th August, Tuesday Room E4-3063 11:30–12:00: Congpei An and Yuanyang Zhou, Study on numerical approximation of spherical functions

12:00-12:30: Lihua Yang, Demodulation of signals and Vakman's problem

# 5th August, Wednesday

Room E4-3063

11:30-12:00: Hong Li, Self–learning based label propagation for hyperspectral image classification

12:00-12:30: Yunzhang Li, Some results on discrete space Gabor analysis

## 5th August, Wednesday Room E4-3056

15:15–15:45: Youming Liu, Consistency and convergence rates for regression functions with some noises

15:45–16:15: Youfa Li, Framelet–based sampling approximation in Sobolev space and its application in computation of Hilbert transform

# 7th August, Friday

Room E4-3064

11:00–11:30: Marcin Piekarczyk, Touch–less personal verification using palm and fingers movements tracking

11:30–12:00: Rongrong Lin, Improved convergence rates for the Gaussian regularized Shannon sampling series

## Session 21

# 7th August, Friday

Room E4-3053

 $14{:}00{-}14{:}30{:}$  Akira Morimoto, Image source separation based on n–tree discrete wavelet transforms

14:30–15:00: Nobuko Ikawa, A model of relationship between waveform–averaging and slow auditory brain–stem response by using discrete stationary wavelet analysis

 $15{:}00{-}15{:}30{:}$  Takahiro Noi, Wavelet decompositions for two–microlocal Besov spaces with variable exponents

15:30–16:00: Keiko Fujita, Gabor transformation on the sphere

16:30–17:00: Kiyoshi Mizohata, The analysis of big data by wavelets

17:00–17:30: Kensuke Fujinoki, Properties of two–dimensional nonseparable average interpolating wavelets

Session 22

4th August, Tuesday Room E4-3053
11:30–12:00: Nurzhan Bokayev, Embedding theorems for generalized Besov type spaces with respect to multiplicative systems
12:00–12:30: Elijah Liyand, On theorems of F. and M. Riesz
15:15–15:45: Seheon Ham, Averaged decay estimates for Fourier transform of measures over space curves
15:45–16:15: Senthil Raani KS, Fourier asymptotics of fractal measures
16:35–17:05: E. Nursultanov, On multipliers of Fourier series
17:05–17:35: Humberto Rafeiro, Generalized Morrey spaces and fractional integral operators
17:35–18:05: Sergey Tikhonov, Pitt inequalities vs. restriction theorems for the Fourier transform

Session 23

7th August, Friday Room E4-3054 12:00–12:30: Jingshi Xu, Variable integral exponent Besov and Triebel–Lizorkin spaces associated with non–negative self–adjoint operators

7th August, Friday Room E4-3062 16:30–17:00: Rauan Akylzhanov, Hardy–Littlewood, Hausdorff–Young–Paley inequalities, and  $L_p-L_q$  Fourier multipliers on compact homogeneous manifolds

Joint days Sessions 9, 13, 14 and 19, 5th August, Wednesday

5th August, Wednesday

**Room E4-G078** 

11:30–12:00: M. W. Wong, Pseudo–differential operators on non–isotropic Heisenberg groups with multi–dimensional centers

12:00–12:30: J. Toft, Mapping properties for the Bargmann transform on small test function and large distribution spaces

15:15–15:45: M. Gobbino, Effectiveness of time-dependent damping terms for second order evolution equations

15:45–16:15: M. Nakamura, Uniform resolvent estimate for stationary dissipative wave equations in an exterior domain and their application to the principle of limiting amplitude

16:35–17:05: S. Pilipović, On the convolution of ultradistributions of quasi–analytic class 17:05–17:35: S. Y. Chung, A characterization of nonlinear source for blow–up solutions to discrete semi–linear heat equations on networks

17:35–18:05: N. Bez, Sharp bilinear estimates for the wave equation

**18:05–18:35**: T. Ogawa, Finite time blow up and non–uniform bound for a solution to three dimensional drift diffusion system