

Program at a Glance																	
Day 1 8 Dec (Mon)					Day 2 9 Dec (Tue)						Day 3 10 Dec (Wed)					Day 4 11 Dec (Thu)	
8:30 Registration and Morning Tea					9:00-9:45 Irene Fonseca <i>Variational Methods for Crystal Surface Instability</i>						9:00-9:45 Zhouping Xin <i>On Global Well-Posed-ness of The Multi-Dimensional Compressible Navier-Stokes Systems</i>					9:15-10:00 Tony Chan <i>Four Color Theorem for Image Segmentation</i> 10:00-10:45 Thomas Y. Hou <i>Computing Multiscale Stochastic PDEs using Data-Driven Stochastic Basis</i>	
9:00-9:30 Opening Ceremony																	
9:30-10:15 Philippe Ciarlet <i>Direct Computation of Stresses in Elasticity</i>																	
10:15-10:30 Coffee Break					9:45-10:15 Coffee Break						9:45-10:15 Coffee Break					10:45-11:15 Coffee Break 11:15-12:00 Selim Esedoglu <i>A PDE-Based Approach to Non-Dominated Sorting</i> 12:00-14:00 Light Lunch + Coffee Break	
10:30-12:00					10:15-11:45		10:15-12:15				10:15-12:15						
WLB201	WLB206	WLB104	WLB207	WLB202	WLB203	WLB201	WLB202	WLB206	WLB207	WLB104	WLB201	WLB202	WLB207	WLB104	WLB206		
MS2 (Part I)	MS10 (Part I)	MS3	MS9 (Part I)	MS11 (Part I)	MS4 (Part II)	MS7	MS5 (Part I)	MS8 (Part I)	MS9 (Part II)	MS10 (Part II)	MS5 (Part II)	MS6	MS9 (Part III)	MS10 (Part IV)	MS11 (Part II)	11:15-12:00 Selim Esedoglu <i>A PDE-Based Approach to Non-Dominated Sorting</i>	
Y Chen	R Zhang	A Chertock	X Ji	X Xu	G Grun	Y Wang	X Xu	Y Kim	K Ren	C-T Wu	D Yang	T Wihler	J Sun	Q Sheng	Y J Lee		
Z Xie	Y Ge	D Levy	B Jin	W Ying	Q Wang	P Grohs	J Hu	J Liu	J Li	X Wu	J Huang	R Krause	X Liu	Q-J Meng	W Leng		
C Xu	G Hu	M Lukacova	S Leung	J Wang	Z Qiao	X Zhuang	J Chen	Y-N Young	Y Xu	S-Y Yang	W Ying	S Loisel	X Xu	Y Shih	S Zhang	12:00-14:00 Light Lunch + Coffee Break	
		A Kurganov	Y Guo	Y Xiao			X Xie	W Ying	D Challa	I-L Chern	L Wang	S Wu	T Yin	Y-C Shu	L Zhong		
12:30-14:00 Light Lunch					12:15-14:00 Light Lunch						12:15-14:00 Light Lunch						
14:00-14:45 Zhiming Chen <i>Recent Progress in Perfectly Matched Layer Methods</i> 14:45-15:30 Weizhu Bao <i>Multiscale Methods and Analysis for the Nonlinear Klein-Gordon Equation in the Nonrelativistic Limit Regime</i>					14:00-14:45 Gitta Kutnyniok <i>Compactly Supported Shearlets: Theory and Applications</i> 14:45-15:30 Song Jiang <i>Analysis of the Rayleigh-Taylor Instability in Compressible Viscous Flows</i>						14:00-14:45 Raz Kupferman <i>Weizenbock Manifolds as a Homogenization Limit of Riemannian Manifolds with Defects</i> 14:45-15:30 Siddhartha Mishra <i>Uncertainty Quantification for Measure Valued Solutions of Fluid Dynamics on Hybrid Architectures</i>					14:00-14:45 Qiang Du <i>Asymptotically Compatible Discretizations and Their Applications</i> 14:45-15:30 Fanghua Lin <i>Hydrodynamics of Complex Fluids</i>	
15:30-16:00 Coffee break					15:30-16:00 Coffee break						15:30-16:00 Coffee break					15:30-15:40 SCPDE Closing	
16:00-17:30					16:00-17:30		16:00-18:00				16:00-17:30					16:00-17:20 16:00-17:00	
WLB104	WLB207	WLB206	WLB201	WLB202	WLB207	WLB104	WLB206	WLB201	WLB202	WLB203	WLB206	WLB207	WLB201	WLB104	WLB202	WLB203	
MS1 (Part I)	MS2 (Part II)	MS4 (Part I)	Contributed (Part I)	Contributed (Part II)	MS4 (Part III)	MS10 (Part III)	MS8 (Part II)	Contributed (Part III)	Contributed (Part IV)	Contributed (Part V)	MS1 (Part II)	MS2 (Part III)	MS9 (Part IV)	MS10 (Part V)	Contributed (Part VI)	Contributed (Part VII)	
A Ostermann	D Xu	J Shen	H Azizi	F Chen	X P Wang	J-T Huang	J-J Xu	Y Wang	R Zhang	S Cui	L Einkemmer	Y Yang	P Li	H Sun	K S Chan	D Mothibi	
Q Sheng	J Ma	O Lakkis	A R Adem	K B Amur	B Stinner	F-N Hwang	Z Tan	F Zeng	W Qiu	G Dutta	J Geiser	T Hou	B Xu	S W Vong	R Meher	B Muatjetjeja	
X Wu	X Li	S Sun	M Banda	M S H Chowdhury	H Zhang	S-L Lei	Y Seol	T Silva	H Gao	I Magdalena	E Hansen	Y Huang	W Chen	B Wade	Y He	G Rajchakit	
			Y Huang	K L Mahato				Y Tang	J Gong	C Liang					P Z Kamalia		
			R K Pandey	S Kumar				R Abazari	K Manickam	D Ray							
			C M Khaliq	Y Qi				J Geiser	Q Zhao	W Shen							
											18:30 Banquet						

Monday, 8 December 2014

9:00-9:30	Opening Ceremony				WLB103
9:30-10:15	Plenary Session Chair: Tao Tang 9:30-10:15 Philippe Ciarlet <i>Direct Computation of Stresses in Elasticity</i>				WLB103 p. 4
10:15-10:30	Coffee Break				
10:30-12:00	Parallel Sessions 10:30-12:00 WLB201 MS2 (Part I) <i>High Order Numerical Methods for Integral Equations</i> Y Chen Z Xie C Xu pp. 14-17 WLB206 MS10 (Part I) <i>Recent Trends in the Analysis and Applications of Finite Difference Methods</i> R Zhang Y Ge G Hu pp. 44-51 10:30-12:30 WLB104 MS3 A Chertock D Levy M Lukacova-Medvidova A Kurganov pp. 18-20 WLB207 MS9 (Part I) <i>Analysis and Computation for PDE-Based Inverse Problems</i> X Ji B Jin S Leung Y Guo pp. 38-43 WLB202 MS11 (Part I) <i>Fast Solvers for Large-Scale Linear Systems from Partial Differential Equations</i> X Xu W Ying J Wang Y Xiao pp. 52-55				
12:30-14:00	Light Lunch				Platform of 3/F Academic & Administration Building
14:00-14:45	Plenary Session Chair: Hermann Brunner 14:00-14:45 Zhiming Chen <i>Recent Progress in Perfectly Matched Layer Methods</i> 14:45-15:30 Weizhu Bao <i>Multiscale Methods and Analysis for the Nonlinear Klein-Gordon Equation in the Nonrelativistic Limit Regime</i>				WLB103 p. 3 p. 2
15:30-16:00	Coffee break				
16:00-18:00	Parallel Sessions 16:00-17:30 WLB104 MS1 (Part I) <i>Operator Splitting Methods for PDEs</i> A Ostermann Q Sheng X Wu pp. 10-13 WLB207 MS2 (Part II) <i>High Order Numerical Methods for Integral Equations</i> D Xu J Ma X Li pp. 14-17 WLB206 MS4 (Part I) <i>Numerical Method for Deterministic and Stochastic Phase Field Models</i> J Shen O Lakkis S Sun pp. 21-24 16:00-18:00 WLB201 Contributed Talks (Part I) Chair: F Kwok H Azizi A R Adem M Banda Y Huang R K Pandey C M Khaliq pp. 57-73 WLB202 Contributed Talks (Part II) Chair: H Liu F Chen K B Amur M S H Chowdhury K L Mahato S Kumar Y Qi pp. 57-73				

Tuesday, 9 December 2014

9:00-9:45	Plenary Session Chair: Ming-Chih Lai 9:00-9:45 Irene Fonseca <i>Variational Methods for Crystal Surface Instability</i>					<u>WLB 103</u> p. 5
9:45-10:15	Coffee Break					
10:15-12:15	Parallel Sessions 10:15-11:45 <u>WLB203</u> <u>WLB201</u> 10:15-12:15 <u>MS4</u> <u>MS7</u> <u>WLB202</u> <u>WLB206</u> <u>WLB207</u> <u>WLB104</u> (Part II) (Part I) MS5 MS8 MS9 MS10 <i>Numerical Method for Deterministic and Stochastic Phase Field Models</i> <i>Applied Harmonic Analysis and Sparse Approximation</i> <i>Domain Decomposition Methods with Applications</i> <i>Interfacial Problems and Applications</i> <i>Analysis and Computation for PDE-Based Inverse Problems</i> <i>Recent Trends in the Analysis and Applications of Finite Difference Methods</i> G Grün Y Wang X Xu Y Kim K Ren C-T Wu Q Wang P Grohs J Hu J Liu J Li X Wu Z Qiao X Zhuang J Chen Y-N Young Y Xu S-Y Yang X Xie W Ying D Challa I-L Chern pp. 21-24 pp. 32-33 pp. 25-28 pp. 34-37 pp. 38-43 pp. 44-51					
12:15-14:00	Light Lunch					<u>Platform of 3/F Academic & Administration Building</u>
14:00-15:30	Plenary Session Chair: Kun Xu 14:00-14:45 Gitta Kutyniok <i>Compactly Supported Shearlets: Theory and Applications</i> 14:45-15:30 Song Jiang <i>Analysis of the Rayleigh-Taylor Instability in Compressible Viscous Flows</i>					<u>WLB103</u> p. 7 p. 6
15:30-16:00	Coffee break					
16:00-18:00	Parallel Sessions 16:00-17:30 <u>WLB207</u> <u>WLB104</u> <u>WLB206</u> 16:00-18:00 <u>MS4</u> <u>MS10</u> <u>MS8</u> <u>WLB201</u> (Part III) (Part III) (Part II) Contributed <i>Numerical Method for Deterministic and Stochastic Phase Field Models</i> <i>Recent Trends in the Analysis and Applications of Finite Difference Methods</i> <i>Interfacial Problems and Applications</i> <i>Talks (Part III)</i> Chair: T Zeng X P Wang J-T Huang J-J Xu Y Wang R Zhang S Cui B Stinner F-N Hwang Z Tan F Zeng W Qiu G Dutta H Zhang S-L Lei Y Seol T Silva H Gao I Magdalena Y Tang R Abazari J Gong J Gong C Liang J Geiser Q Zhao K Manickam D Ray W Shen pp. 21-24 pp. 44-51 pp. 34-37 pp. 57-73 pp. 57-73 pp. 57-73					

Wednesday, 10 December 2014

9:00-9:45	Plenary Session Chair: Xiaoping Wang 9:00-9:45 Zhouping Xin <i>On Global Well-Posed-ness of The Multi-Dimensional Compressible Navier-Stokes Systems</i>					<u>WLB103</u> p. 8
9:45-10:15	Coffee Break					
10:15-12:15	Parallel Sessions 10:15-12:15 <u>WLB201</u> MS5 (Part II) <i>Domain Decomposition Methods with Applications</i> D Yang J Huang W Ying L Wang pp. 25-28 <u>WLB202</u> MS6 <i>Parallel and Adaptive Solution of Time-Dependent PDEs</i> T Wihler R Krause S Loisel S Wu pp. 29-31 <u>WLB207</u> MS9 (Part III) <i>Analysis and Computation for PDE-Based Inverse Problems</i> J Sun X Liu X Xu T Yin pp. 38-43 <u>WLB104</u> MS10 (Part IV) <i>Recent Trends in the Analysis and Applications of Finite Difference Methods</i> Q Sheng Q-J Meng Y Shih Y-C Shu pp. 44-51 <u>WLB206</u> MS11 (Part II) <i>Fast Solvers for Large-Scale Linear Systems from Partial Differential Equations</i> Y J Lee W Leng S Zhang L Zhong pp. 52-55					
12:15-14:00	Light Lunch					<u>Platform of 3/F Academic & Administration Building</u>
14:00-15:30	Plenary Session Chair: Michael Ng 14:00-14:45 Raz Kupferman Weizenbock Manifolds as a Homogenization Limit of Riemannian Manifolds with Defects 14:45-15:30 Siddhartha Mishra <i>Uncertainty Quantification for Measure Valued Solutions of Fluid Dynamics on Hybrid Architectures</i>					<u>WLB103</u> p. 6 p. 8
15:30-16:00	Coffee break					
16:00-17:30	Parallel Sessions 16:00-17:30 <u>WLB206</u> MS1 (Part II) <i>Operator Splitting Methods for PDEs</i> L Einkemmer J Geiser E Hansen pp. 10-13 <u>WLB207</u> MS2 (Part III) <i>High Order Numerical Methods for Integral Equations</i> Y Yang T Hou Y Huang pp. 14-17 <u>WLB201</u> MS9 (Part IV) <i>Analysis and Computation for PDE-Based Inverse Problems</i> P Li B Xu W Chen pp. 38-43 <u>WLB104</u> MS10 (Part V) <i>Recent Trends in the Analysis and Applications of Finite Difference Methods</i> H Sun S W Vong B Wade pp. 44-51 16:00-17:20 <u>WLB202</u> Contributed Talks (Part VI) Chair: L Ling K S Chan R Meher Y He P Z Kamalia pp. 57-73 16:00-17:00 <u>WLB203</u> Contributed Talks (Part VII) Chair: X Yuan D Mothibi B Muatjetjeja G Rajchakit pp. 57-73					
18:30	Banquet					<u>Yau Yat Chuen Garden City Club</u>

Thursday, 11 December 2014

9:15-10:45	Plenary Session Chair: Pingwen Zhang 9:15-10:00 Tony Chan <i>Four Color Theorem for Image Segmentation</i> 10:00-10:45 Thomas Y. Hou <i>Computing Multiscale Stochastic PDEs using Data-Driven Stochastic Basis</i>	<u>WLB103</u> p. 3 p. 5
10:45-11:15	Coffee Break	
11:15-12:00	Plenary Session Chair: Pingwen Zhang 11:15-12:00 Selim Esedoglu <i>A PDE-Based Approach to Non-Dominated Sorting</i>	<u>WLB103</u> p. 5
12:00-14:00	Light Lunch Coffee Break	<u>Platform of 3/F Academic & Administration Building</u>
	Plenary Session Chair: Tao Tang 14:00-14:45 Qiang Du <i>Asymptotically Compatible Discretizations and Their Applications</i> 14:45-15:30 Fanghua Lin <i>Hydrodynamics of Complex Fluids</i>	<u>WLB103</u> p. 4 p. 7
15:30-15:40	SCPDE Closing	<u>WLB103</u>