Conference Program ICOME & Trefftz/MFS 2015 Hangzhou, China, October 11-13, 2015

(20151009v1)

Conference Program

Oct. 11, Morning, Huagang Hall (8th Floor)

- 09:00 09:50 Opening Ceremony (Combined Conferences 1 and 2)
- 09:50 10:30 Plenary Lecture 1: (Andreas Karageorghis)
- 10:30 11:10 Group Photo Taking and Tea Break
- 11:10 11:50 Plenary Lecture 2: (Chein-Shan Liu)
- 11:50 12:30 Plenary Lecture 3: (Zhenhan Yao)
- 12:30 13:30 Lunch (Chinese Restaurant, 3rd Floor)

Oct. 11, Afternoon, Huagang Hall (8th Floor)

- 14:00 14:40 Plenary Lecture 4: (Naoshi Nishimura)
- 14:40 15:20 Plenary Lecture 5: (Jeng-Tzong Chen)
- 15:20 15:40 Tea Break

Oct. 11, Afternoon, Parallel Sessions

Time	Conference 1		Confe	rence 2	
	Huagang Hall (8th Floor)	Yunqi Hall (3rd Floor)	Wolong Hall (3rd Floor)	Huanbi Hall (3rd Floor)	Guiyu Hall (3rd Floor)
15:50 - 17:40	BEM-1	FEM-1	MF/MPM-1	MFS-1	RBF-1
18:00 - 19:30	Reception (Chinese Restaurant, 3rd Floor)				

Oct. 12, Morning, Parallel Sessions

Time	Conference 1		Confer	rence 2	
	Huanglong Hall (8th Floor)	Yunqi Hall (3rd Floor)	Wolong Hall (3rd Floor)	Huanbi Hall (3rd Floor)	Guiyu Hall (3rd Floor)
09:00 - 10:40	BEM-2	FEM-2	MF/MPM-2	MFS-2	RBF-2
10:40 - 11:00	Tea Break				
11:00 - 12:30	BEM-3	FEM-3	MF/MPM-3	MFS-3	Trefftz-1
12:30 - 13:30	Lunch (Western Restaurant,1st Floor)				

Oct. 12, Afternoon, Parallel Sessions

Time	Conference 1		Confe	rence 2	
	Huanglong Hall (8th Floor)	Yunqi Hall (3rd Floor)	Wolong Hall (3rd Floor)	Huanbi Hall (3rd Floor)	Guiyu Hall (3rd Floor)
13:30 - 15:20	BEM-4	FEM-4	BEM-8	MFS-4	Trefftz-2

15:20 - 15:40			Tea Break		
15:40 - 17:30	BEM-5	FEM-5	BEM-9	MFS-5	BEM-1
18:00 - 19:30		Banquet (W	Vestern Restaurar	nt,1st Floor)	

Oct. 13, Morning, Parallel Sessions

Time	Conference 1		Conferen	nce 2	
	Huanglong Hall (8th Floor)	Yunqi Hall (3rd Floor)		Huanbi Hall (3rd Floor)	Guiyu Hall (3rd Floor)
09:00 - 10:40	BEM-6	BEM-10		FIM-1	RBF-3
10:40 - 11:00			Tea Break		
11:00 - 12:50	BEM-7	FEM-6		FEM-1	BEM-2
12:50 - 13:50		Lunch (Western Restaurant,1st Floor)			

Oct. 13, Afternoon, Tour

Plenary Lectures

Date: Oct. 11 (Sunday) Time: 09:50 – 15:20 Place: Huagang Hall (8th Floor) Chair: Alex Cheng, Yao Zheng

Time	Lectures	Authors	Titles
09:50 – 10:30	Plenary 1	Andreas Karageorghis	Recent developments in the MFS and future challenges
11:10 – 11:50	Plenary 2	Chein-Shan Liu	The polynomial Trefftz method for solving backward and inverse source wave problems
11:50 – 12:30	Plenary 3	Zhenhan Yao	A new type of high-performance BEM and local stress analysis of real beam, plate and shell structures
14:00 – 14:40	Plenary 4	Naoshi Nishimura	Applications of FMBEM to optical problems related to metamaterials
14:40 – 15:20	Plenary 5	Jeng-Tzong Chen	A self-regularized method for singular systems in the BEM and the FEM

Conference 1 - Session BEM-1

Date: Oct. 11 (Sunday) Time: 15:50 – 17:20 Place: Huagang Hall (8th Floor) Chair: Naoshi Nishimura, Haitao Wang

Time	Authors	Titles	Notes
15:50 – 16:20	Chuanzeng Zhang	Numerical simulation of elastic wave propagation in periodically layered composites with cracks	Keynote
16:20 – 16:40	Hitoshi Yoshikawa, Satoshi Yamamoto	Time domain BIEM for scalar wave problems in 2-D using H-matrix and low rank approximation	Invited
16:40 – 17:00	Ryota Misawa, Kazuhi Niino, Naoshi Nishimura	Analysis of resonance frequencies in waveguide problems for Helmholtz' equation in 2-D using the Sakurai-Sugiura projection method	Invited
17:00 – 17:20	Liqi Liu, Haitao Wang	A comparative study on the time domain BEM analysis of 3-D wave propagations	
17:20 – 17:40	Xiaobin Feng, Taiyan Qin, Linnan Zhang, Ting Cao	Application of singular integral equations to crack problems in piezoelectric bimaterials	

Conference 1 - Session FEM-1

Date: Oct. 11 (Sunday) Time: 15:50 – 17:10 Place: Yunqi Hall (3th Floor) Chair: Shengping Shen, Guangyu Shi

Time	Authors	Titles	Notes
15:50 – 16:10	Yiqian He, Chongshuai Wang, Haitian Yang	A scaled boundary finite element method for viscoelastic problems with cyclically symmetric structures	Invited

16:10 – 16:30	Jianyong Chen, Shengping Shen	A finite element implementation with UEL in ABAQUS for fully coupled mechanical–chemical processes	
16:30 – 16:50	Cong Xie, Guangyu Shi	An accurate FGM beam element based on a refined shear deformable beam theory	
16:50 – 17:10	Xi Zhao, Yang Ju, Jianguo Wang	Numerical study on the hydro-fracturing perforation effects of reservoirs using high performance finite element methods	

Conference 1 - Session MF/MPM-1

Date: Oct. 11 (Sunday) Time: 15:50 – 17:20 Place: Wolong Hall (3th Floor) Chair: Xiong Zhang, Xiaolin Li

Time	Authors	Titles	Notes
15:50 – 16:20	Dongdong Wang, Hanjie Zhang, Penjie Chen	Isogeometric enriched quasi-convex meshfree method	Keynote
16:20 – 16:40	Douglas Ng, Benny Hon	Kernel-based approximation method for medical imaging problem	Invited
16:40 – 17:00	Hanjie Zhang, Dongdong Wang, Wei Liu	Superconvergent isogeometric analysis of thin plate vibrations	
17:00 – 17:20	X. C. Qin, C. Y. Dong	Isogeometric analysis of curvilinearly stiffened plates and shells	
17:20 – 17:40	Xiaolin Li, Jialin Zhu	Analysis and applications of two moving least square approximation-based meshless methods	

Conference 2 - Session MFS-1

Date: Oct. 11 (Sunday) Time: 15:50 – 16:40 Place: Huanbi Hall (3th Floor)

Chair: Csaba Gaspar, Zhuojia Fu

Time	Authors	Titles	Notes
15:50 – 16:20	Carlos J. S. Alves	Implementation of the MFS for nonlinear problems and discontinuous data	Keynote
16:20 – 16:40	Magdalena Mierzwiczak, Jan Adam Kolodziej, Jakub Krzysztof Grabski	The generalized Newtonian fluid flow through a bundle of regular fibers	
16:40 – 17:00	Magdalena Mierzwiczak, Jan Adam Kolodziej, Jakub Krzysztof Grabski	The generalized Newtonian fluid flow through a bundle of regular fibers	

Conference 2 - Session RBF-1

Date: Oct. 11 (Sunday) Time: 15:50 – 17:10 Place: Guiyu Hall (3th Floor)

Chair: Der-Liang Young, Ming Li

Time	Authors	Titles	Notes
15:50 – 16:20	Robert Schaback	Rigorous convergence analysis of meshless computational methods	Keynote
16:20 – 16:40	Wen Chen, Fajie Wang, Zhuojia Fu	Physics-based time-space RBFs for dynamic interpolation	
16:40 – 17:10	H. Power, S. J. Jackson, D. Stevens, D. Giddings	A high resolution RBF local meshless tracking approach for moving boundary transport problems	Keynote

Conference 1 - Session BEM-2

Date: Oct. 12 (Monday) Time: 09:00 – 10:30 Place: Huanglong Hall (8th Floor) Chair: Zhenlin Ji, Xiaoping Zheng

Time	Authors	Titles	Notes
09:00 – 09:30	Haibo Chen, Leilei Chen	Structural-acoustic sensitivity analysis for fully coupled system based on FEM/ discontinuous FMBEM	Keynote
09:30 – 09:50	Liang Yang, Zhenlin Ji	Acoustic attenuation prediction of perforated silencers using fast multipole mixed-body boundary element method	Invited
09:50 – 10:10	Jinlong Feng, Xiaoping Zheng, Yinghua Liu, Zhenhan Yao	A high-accuracy boundary element method for solving acoustic problems	
10:10 – 10:30	Cheng Liu, Leilei Chen, Wenchang Zhao, Haibo Chen	A wide-band FMBEM for 2D noise barrier using different types of elements	

Conference 1 - Session FEM-2

Date: Oct. 12 (Monday) Time: 09:00 – 10:40 Place: Yunqi Hall (3th Floor)

Chair: Ran Guo, Weifeng Yuan

Time	Authors	Titles	Notes
09:00 – 09:30	Chia-Ming Fan, Tsung-Han Li, Chien-Chung Chang, Po-Wei Li, Yu-Kai Huang	Generalized finite difference method for solving inverse Cauchy problems	Keynote
09:30 – 10:00	Ran Guo, Rui Zhang, Benning Qu, Yangjin Chen	FEM-VCFEM multiscale simulation of damage evolution and fracture in macro-structure of particulate reinforced composites	Keynote
10:00 – 10:20	Zeyun Chen, Weifeng Yuan	A cellular automaton method for elastostatics	Invited
10:20 – 10:40	Yijiang Peng, Yao Wang	Meso-mechanics analysis of recycled aggregate concrete using 3D base force element method	

Conference 1 - Session MF/MPM-2

Date: Oct. 12 (Monday) Time: 09:00 – 10:20 Place: Wolong Hall (3th Floor)

Chair: Dongdong Wang, Yunatong Gu

Time	Authors	Titles	Notes
09:00 – 09:20	Yan Liu, Ping Liu, Xiong Zhang	Shielding performance of honeycomb sandwich structure for high-velocity impact: a numerical investigation	Invited
09:20 -	Hasitha-Nayanajith	A 3D coupled SPH-DEM model to predict the	Invited

09:40	Polwaththe-Gallage, Yuantong Gu	behavior of infected red blood cells in stenosed capillaries	
09:40 – 10:00	Xiayong Gu, Chunying Dong	Simulation of transient heat conduction for a stationary medium using the material point method	
10:00 - 10:20	Fan Zhang, Xiong Zhang	Fluid structure interaction based on incompressible material point method coupling with rigid body	

Conference 2 - Session MFS-2

Date: Oct. 12 (Monday) Time: 09:00 – 10:30 Place: Huanbi Hall (3th Floor)

Chair: (Carlos J.	S. Alves,	Chia-Ming Fan	
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Time	Authors	Titles	Notes
09:00 – 09:30	Csaba Gaspar	A multi-level method of fundamental solutions without an explicit use of fundamental solutions	Keynote
09:30 – 09:50	Zhuojia Fu, Wen Chen	Water wave interaction with multiple circular and elliptical cylinders by singular boundary method	Invited
09:50 – 10:10	Wen Chen, Junpu Li, Zhuojia Fu	SBM based on time-dependent fundamental solution for Scalar Wave Equation	
10:10 – 10:30	Yu-Kai Huang, Chia-Ming Fan	Numerical solutions of Signorini problems by singular boundary method	

Conference 2 - Session RBF-2

Date: Oct. 12 (Monday) Time: 09:00 - 10:30 Place: Guiyu Hall (3th Floor)

Chair: Robert Schaback, H. Power,

Time	Authors	Titles	Notes
09:00 – 09:30	Der-Liang Young, Chung-Yi Lin	The localized method of approximated particular solutions for solving incompressible Navier-Stokes equations	Keynote
09:30 – 09:50	Siqing Li, Leevan Ling, Ming Li	Node-based smoothed point interpolation method with shape function based Gaussian basis functions	
09:50 – 10:10	Chia-Cheng Tsai	Using local RBF collocation method with coupled equation approach for solving high-order radiation boundary conditions	Invited

Conference 1 - Session BEM-3

Date: Oct. 12 (Monday) Time: 11:00 – 12:20 Place: Huanglong Hall (8th Floor)

Chair: Sohichi Hirose, Yongqiang Chen

Time	Authors	Titles	Notes
11:00 –	Sohichi Hirose, Akira	Convolution quadrature boundary element method for	Keynote
11:30	Furukawa, Takahiro Saitoh	dynamic crack analysis in a general anisotropic elastic	

		solid	
11:30 – 11:50	Taizo Maruyama, Takahiro Saitoh, Sohichi Hirose	Fast time-domain BEM for three-dimensional crack problems	Invited
11:50 – 12:10	Qinye Lin, Yongqiang Chen	Application of BEM on analysis of interface debonding	
12:10 – 12:30	Qi Zhou, Yongqiang Chen	BEM simulation of interface debonding due to thermomechanical loading	

Conference 1 - Session FEM-3

Date: Oct. 12 (Monday) Time: 11:00 – 12:30 Place: Yunqi Hall (3th Floor) Chair: Ning Hu, Yinghua Liu

Time	Authors	Titles	Notes
11:00 – 11:30	Ning Hu, Yaolu Liu	Construction of a Mindlin plate element for analysis of structural static and dynamic responses and elastic wave propagation	Keynote
11:30 – 11:50	Kazuhisa Abe, Shun Furusato, Pher Errol Balde Quinay, Kazuhiro Koro	Dynamic response analysis of a periodic structure on a half-space subjected to incident waves	Invited
11:50 – 12:10	Jie Zhang, Donghuan Liu, Yinghua Liu	Accuracy of a composite implicit time integration scheme for damped linear structural dynamics	
12:10 – 12:30	Zhiwei Liu, Yuefang Wang	A semi-analytical, semi-numerical method for predicting period-M motions of nonlinear systems	

Conference 1 - Session MF/MPM-3

Date: Oct. 12 (Monday) Time: 11:00 – 12:30 Place: Wolong Hall (3th Floor) Chair: Ying-Te Lee, Zhuijia Fu

Time	Authors	Titles	Notes
11:00 – 11:30	Wen Chen, Fajie Wang	Singular boundary method using time-dependent fundamental solution for diffusion problems	Keynote
11:30 – 11:50	Ying-Te Lee, Chia-Ming Fan, Shyh-Rong Kuo	A nonsingular boundary collocation method for the inverse problems in elasticity	Invited
11:50 – 12:10	Wenzhen Qu, Wen Chen, Changjun Zheng	Fast multipole singular boundary method in diagonal form for acoustic radiation and scattering	
12:10 – 12:30	Po-Wei Li, Chia-Ming Fan	A characteristic-based meshless model for numerical solutions of shallow water equations	

Conference 2 - Session MFS-3

Date: Oct. 12 (Monday) Time: 11:00 – 12:30 Place: Huanbi Hall (3th Floor) Chair: Anita Uscilowska, Wataru Fujisaki

Time	Authors	Titles	Notes
11:00 – 11:30	Jan Adam Kolodziej, Magdalena Mierzwiczak, Jakub Krzysztof Grabski	Application of the MFS and the SPTF for determination of flow through fibrous porous media	Keynote
11:30 – 11:50	Jakub Krzysztof Grabski, Jan Adam Kolodziej	Application of the MFS and the RBF for analysis of fluid flow and heat transfer in s tube with internal triangular fins	
11:50 – 12:10	Alexander HD. Cheng	Fundamental solutions of poroelasticity, poroelastodynamics, and porothermoelasticity	Invited
12:10 – 12:30	Xiangnan Pei, Fangfang Dou	The method of approximate fundamental solutions for solving Laplace equation with non-harmonic boundary condition	

Conference 2 - Session Trefftz-1

Date: Oct. 12 (Monday) Time: 11:00 - 12:30 Place: Guiyu Hall (3th Floor)

Chair: Tzon-Tzer Lu, Chein-Shan Liu

Time	Authors	Titles	Notes
11:00 – 11:30	Krzysztof Grysa, Artur Maciag, Magdalena Walaszczyk	Trefftz method in solving nonlinear coefficient inverse heat conduction problems	Keynote
11:30 – 11:50	Amin Ghannadiasl	Solution for the free vibration of simply supported annular plates by indirect Trefftz method	
11:50 – 12:10	Krzysztof Grysa, Artur Maciag, Patrycja Krzyszkowska	Solving nonlinear direct and inverse transient heat conduction problems by means of Trefftz functions	Invited
12:10 – 12:30	Chung-Lun Kuo, Wun-Sin Jhao, Chein-Shan Liu	The multiple-scale polynomial Trefftz method for solving inverse heat conduction problems	Keynote

Conference 1 - Session BEM-4

Date: Oct. 12 (Monday) Time: 13:30 – 15:20 Place: Huanglong Hall (8th Floor) Chair: Zhongrong Niu, Kazuki Niino

Time	Authors	Titles	Notes
13:30 – 14:00	Huanlin Zhou, Yu Tian, Bo Yu, Zhngrong Niu	The natural boundary integral equation of the orthotropic potential problem	Keynote
14:00 – 14:20	Kazuki Niino, Sho Akagi, Naoshi Nishimura	A discretisation method with the Hdiv inner product for electric field integral equations with the Calderon preconditioning	Invited
14:20 – 14:40	Fenglin Zhou, Yuan Li, Jianming Zhang	A time step amplification scheme in boundary face method for transient heat conduction	
14:40 – 15:00	Bo Yu, Huanlin Zhou Haolong Chen	Precise time-domain expanding BEM for solving non-Fourier heat conduction problems with laser heat sources	
15:00 – 15:20	Haolong Chen, Bo Yu, Huanlin Zhou	Shape identification of 2-D steady state heat conduction problem with heat source	

Conference 1 - Session FEM-4

Date: Oct. 12 (Monday) Time: 13:30 – 15:00 Place: Yunqi Hall (3th Floor) Chair: De'an Hu, Ji Wang

Time	Authors	Titles	Notes
13:30 – 14:00	De'an Hu, Detao Wan, Xu Han	A reduced integration coupling with the smoothing technique for the axisymmetric problem	Keynote
14:00 – 14:20	Ji Wang, Lihong Wang, Rongxing Wu, Bin Huang, Jianke Du, Wei Xiang	Tuning and optimizing the element analysis with elements of large nodal DOF on a Linux cluster	
14:20 – 14:40	Peng Zhang, Xiaofei Hu, Weian Yao	Cohesive crack propagation analysis using an analytical singular element	
14:40 – 15:00	Dinghe Li	Extended layerwise method of laminated composite shells	

Conference 1 - Session BEM-8

Date: Oct. 12 (Monday) Time: 13:30 – 15:00 Place: Wolong Hall (3th Floor) Chair: Hang Ma, Wenjing Ye

Time	Authors	Titles	Notes
13:30 – 14:00	Hang Ma	Computation of stress intensity factors of cracks in particle and matrix with dual boundary integral equations	Keynote

14:00 – 14:20	Renyu Ge, Zhongrong Niu, Changzheng Cheng, Zongjun Hu	Extended BEM of evaluating stress intensity factors of V-notch perpendicular to an interface with bounded dissimilar materials	
14:20 – 14:50	Martin Schanz, Wenjing Ye, Jinyou Xiao	On the relationship between convolution quadrature method and frequency domain approach in the modeling of wave propagation	Keynote

Conference 2 - Session MFS-4

Date: Oct. 12 (Monday) Time: 13:30 – 15:00 Place: Huanbi Hall (3th Floor) Chair: Jan Adam Kolodziej, Wataru Fujisaki

Time	Authors	Titles	Notes
13:30 – 14:00	Anita Uscilowska, Agnieszka Fraska	The torsion of orthotropic FGM hollow bars – simulations by MFS	Keynote
14:00 – 14:20	Sarler Bozidar, Shiting Wen, Rizwan Zahoor, Kai Wang, Ming Li	Method of regularized sources for axisymmetric Stokes flow problems - development of analytical expressions	
14:20 – 14:40	Wataru Fujisaki, Hayato Kubota	Improved allocations of source loads for notched plate problems using the MFS	Invited
14:40 – 15:00	C. S. Chen, Andrea Karageorghis, Yan Li	On choosing the location of the sources in the MFS	

Conference 2 - Session Trefftz-2

Date: Oct. 12 (Monday) Time: 13:30 - 14:30 Place: Guiyu Hall (3th Floor)

Chair: Krzysztof Grysa

Time	Authors	Titles	Notes
13:30 – 13:50	Guan-Yu Lin, Tzon-Tzer Lu	Transition of convergent orders of Trefftz method	Invited
13:50 – 14:10	Tao Zhang	Application of a modified Trefftz method in Cauchy inverse problems of two dimensional & three dimensional elasticity	

Conference 1 - Session BEM-5

Date: Oct. 12 (Monday) Time: 15:40 – 17:10 Place: Huanglong Hall (8th Floor) Chair: Chunying Dong, Haibo Chen

Time	Authors	Titles	Notes
15:40 – 16:10	Yao Zheng, Zhoufang Xiao, Jianjun Chen, Jianjing Zheng	Viscous grid generation by the boundary element method	Keynote
16:10 – 16:30	Z.Y. Liu, C.Y. Dong	Boundary element and material point coupling method for high speed metal cutting	

16:30 – 16:50	Leilei Chen, Haibo Chen	Numeric performance of structure fluid interaction using a coupled approach with FEM and discontinuous BEM	
16:50 – 17:10	Xiaomin Shu, Jianming Zhang, Xingshuai Zheng	Enriched element for three-dimensional elastic contact problem with non-conforming discretization	

Conference 1 - Session FEM-5

Date: Oct. 12 (Monday) Time: 15:40 - 17:20 Place: Yunqi Hall (3th Floor)

Chair: Boyang Ding, Yonggang Zheng

Time	Authors	Titles	Notes
15:40 – 16:00	Yonggang Zheng, Yin Liu, Hongwu Zhang	Finite element modeling of polymeric hydrogels: from steady to transient solutions	Invited
16:00 – 16:20	Pei Zheng, Boyang Ding	Body force equivalents for dynamic dislocations in fluid-saturated porous media	
16:20 – 16:40	Jinhui Liu, Yang Ju, Hongbin Liu	Investigation on thermal spalling behavior of reactive powder concrete	
16:40 – 17:00	Jiansheng Zhang, Weihang Li, Jiandong Wang, Jin Tao, Liping Wu	Field measurements of wind characteristics on hyperbolic parabolic membrane structure	
17:00 – 17:20	Jiansheng Zhang, Jin Tao, Jiandong Wang, Weihang Li	Numerical simulation study of wind load on multi-span saddle membrane structure	

Conference 1 - Session BEM-9

Date: Oct. 12 (Monday) Time: 15:40 – 17:10 Place: Wolong Hall (3th Floor) Chair: Huanlin Zhou, Minghao Zhao

Time	Authors	Titles	Notes
15:40 – 16:10	Zhongrong Niu, Renyu Ge, Changzheng Cheng, Zongjun Hu	Extended BEM of determinating the singular stress field and the boundary shape of plastic domain of plane V-notch in hardening materials	Keynote
16:10 – 16:30	Shibo Wang, Minghao Zhao, Guangtao Xu, Cuiying Fan, Ernian Pan	Fracture analysis of a cracked dielectric plate via a novel boundary element method	
16:30 – 16:50	Changzheng Cheng, Shenyu Ge, Zongjun Hu, Zhongrong Niu	Evaluation of thermal stress intensity factors of V-notch by the boundary element method	
16:50 – 17:10	Chunguang Zhou, Minghao Zhao, Guangtao Xu, Cuiying Fan	Numerical method of penny-shaped cracks in three-dimensional piezoelectric semiconductors	

Conference 2 - Session MFS-5

Date: Oct. 12 (Monday) Time: 15:40 – 17:10 Place: Huanbi Hall (3th Floor) Chair: Liviu Marin, Anita Uscilowska

Time	Authors	Titles	Notes
15:40 – 16:10	Liviu Marin	The MFS approach to some inverse problems in solids subject to thermo-mechanical loads	Keynote
16:10 – 16:30	Jakub Krzysztof Grabski, Daniel Lesnic, B. Tomas Johansson	Application of the MFS for identification of the time-dependent blood perfusion coefficient with internal temperature measurements	
16:30 – 16:50	Anita Uscilowska, Marta Chudzicka-Adamczak	Comparison of the temperature distribution as a result of computer simulation using the method of fundamental solution with infrared image for the external insulation of building	
16:50 – 17:10	Fang Hao, Hui Lv, Wanru Chang, C. S. Chen	Comparison of Trefftz method and the MFS on the non-harmonic boundary condition and irregular boundary	

Conference 2 - Session BEM-1

Date: Oct. 12 (Monday) Time: 15:40 – 17:00 Place: Guiyu Hall (3th Floor) Chair: Ernian Pan, Weiqiiu Chen

Time	Authors	Titles	Notes
15:40 – 16:00	Xianhui Wang	A multi-frequency technique for Helmholtz boundary element method	
16:00 – 16:20	Qiao Wang, Wei Zhou	Fast multipole line integration method for treatment of domain integrals in boundary element method	
16:20 – 16:40	Yilan Huang, Weiqiu Chen	On the Green's functions for a compressible soft electroactive half-space and two-phase medium	
16:40 – 17:00	Hui Wang, Qinghua Qin, Yuxun Kang	Eigenvalue computation of acoustic wave problems using fundamental solution-based hybrid finite element formulation	

Conference 1 - Session BEM-6

Date: Oct. 13 (Tuesday) Time: 09:00 – 10:30 Place: Huanglong Hall (8th Floor) Chair: Shyh-Rong Kuo, Chunying Dong

Time	Authors	Titles	Notes
09:00 – 09:30	Boyang Ding, Jiaqi Jiang, Jing Hu	2-D Green's Functions of a Porous Medium in Time-Domain and Numerical Implementation for Dynamic Response by BEM	Keynote
09:30 – 09:50	Xiaowei Gao Yunfei Liu, Jun Lv	A new method applied to the quadrilateral membrane element with vertex rigid rotational freedom	Invited
09:50 – 10:10	Shyh-Rong Kuo, Jeng-Tzong Chen, Yu-Lung Chang, Shing-Kai Kao	Revisit of the degenerate scale for plate problems	Invited
10:10 – 10:30	Y. Bai, C.Y. Dong	Isogeometric BEM of the nano-inhomogeneities with complex geometric shapes	

Conference 1 - Session BEM-10

Date: Oct. 13 (Tuesday) Time: 09:00 – 10:40 Place: Yunqi Hall (3th Floor)

Chair: Yu Miao, Yaoming Zhang

Time	Authors	Titles	Notes
09:00 – 09:20	Yiming Chen, Xuan Li, Xuedao Shu, Guangxian Shen	Complex integral method for computing hypersingular integrals and error estimation	Invited
09:20 – 09:40	Yaoming Zhang	An improved sinh transformation for evaluating nearly singular element integrals in potential problems	Invited
09:40 – 10:00	Miao Yu, Jun Liu, Jiahe Lv	Efficient evaluation of integrals with kernel $1/r^x$ for quadrilateral elements with irregular shape	Invited
10:00 – 10:20	Yudong Zhong, Jianming Zhang, Yunqiao Dong, Yuan Li	A novel integral principle for evaluating 3D weakly singular boundary integrals	
10:20 – 10:40	Qiao Wang, Wei Zhou	Fast line integration boundary element method for elasticity problems with body force	

Conference 2 - Session FIM-1

Date: Oct. 13 (Tuesday) Time: 09:00 – 10:00 Place: Huanbi Hall (3th Floor) Chair: P.H. Wen,

Time	Authors	Titles	Notes
09:00 – 09:20	M. Li, Huasheng Wang, John W. Rose, Junming Li, P.H. Wen	Inverse heat conduction in functionally graded media by finite integration method	
09:20 -	M. Lei, M. Li, P. H. Wen	Moving boundary analysis of multilayer composite	

09:40		heat conduction with finite block method	
09:40 – 10:00	G. F. Sun, G. R. Liu, M. Li	A positive-bounded explicit finite-difference scheme	

Conference 2 - Session RBF-3

Date: Oct. 13 (Tuesday) Time: 09:00 – 10:10 Place: Guiyu Hall (3th Floor) Chair: C.S. Chen

Time	Authors	Titles	Notes
09:00 – 09:20	Xiaoyan Liu, Wen Li, Ming Li, C. S. Chen	Circulant matrix coupled with the MFS for solving PDEs	
09:20 – 09:50	Zongming Wu	A meshless sympletic algorithm for multi variate Hamiltonian PDEs with radial basis approximation	Keynote
09:50 – 10:10	Dongfang Yun	Integration-kernel-based method for solving multi-dimensional partial differential equations	

Conference 1 - Session BEM-7

Date: Oct. 13 (Tuesday) Time: 11:00 – 12:30 Place: Huanglong Hall (8th Floor) Chair: Yiming Chen, Xiaowei Gao

Time	Authors	Titles	Notes
11:00 – 11:30	Xiaowei Gao, Jian Liu, Zhichao Yuan, Wenhao Zeng	Construction of special boundary elements and their applications in BEM analysis of large scale engineering	Keynote
11:30 – 11:50	Chunxiao Yu, Xueting Bai, Guangxian Shen	VRP-GMRES(m) iteration algorithm for fast multipole boundary element method	Invited
11:50 – 12:10	Wenchang Zhao, Leilei Chen, Cheng Liu Haibo Chen	Structural acoustic analysis using a 2D FEM/ discontinuous FMBEM scheme	
12:10 – 12:30	Baotao Chi, Chenjun Lu, Jianming Zhang	CAD model repairing based on T-spline merging	

Conference 1 - Session FEM-6

Date: Oct. 13 (Tuesday) Time: 11:00 – 12:20 Place: Yunqi Hall (3th Floor)

Chair: Yinghua Liu, Chia-Ming Fan

Time	Authors	Titles	Notes
11:00 – 11:20	Xianhe Du, Donghuan Liu, Yinghua Liu	Numerical limit analysis of pressure vessel with volume defect under high temperature	
11:20 – 11:40	Feng Deng, Shengping Shen	The mixed finite element method considering flexoelectric effects	
11:40 – 12:00	Weichug Yeih, I-Yao Chan Cheng-Yu Ku, Chia-Ming	Determining temperature distribution and heat source for materials with nonlinear heat conduction	

	Fan, Jiang-Jhy Chang	coefficients using Cauchy data	
12:00 -	Jiejiang Zhao, Dong Yin,	Numerical simulation of fretting fatigue of steam	
12:20	Lichen Tang, Yongzhong Huo	generator tube in nuclear power plants	

Conference 2 - Session FEM-1

Date: Oct. 13 (Tuesday) Time: 11:00 – 11:50 Place: Huanbi Hall (3th Floor) Chair: C.S. Chen

Time	Authors	Titles	Notes
11:00 – 11:30	R. P. Niu, G. R. Liu, M. Li	Lower bound of vibration modes using the node-based smoothed finite element method (NS-FEM)	Keynote
11:30 – 11:50	R. P. Niu, G. R. Liu, M. Li	A novel technique with a correction term for unsteady state heat transfer problem with moving boundary	

Conference 2 - Session BEM-2

Date: Oct. 13 (Tuesday) Time: 11:00 - 12:20 Place: Guiyu Hall (3th Floor)

Chair: Qinghua Qin, Minghao Zhao

Time	Authors	Titles	Notes
11:00 – 11:20	Boyang Ding, Jiaqi Jiang, Pei Zheng	The Stokes-Darcy system for 2-D Green's functions of porous dynamics and numerical implementation in BEM	
11:20 – 11:40	Yuan Li, Minghao Zhao, Cuiying Fan, Guangtao Xu	Analysis method of planar cracks in a three-dimensional transversely isotropic thermo-magneto-electro-elastic medium	
11:40 – 12:00	Qiaoyun Zhang, Minghao Zhao, Ernian Pan, Cuiying Fan	An elliptical crack with polarization saturation in a piezoelectric half space	
12:00 – 12:20	Ernian Pan	Some fundamental issues and related solutions in anisotropic and layered solids	