Technical Program and Schedule for BEM/MRM36

2013-10-21:

| 08:30-20:30 | Registration | Place |
|-------------|--------------|-------------------------------------|
| | | DUT International Convention Center |

2013-10-22:

| 08:00-08:30 | Opening Ceremony | | | | |
|---------------|--|---|--------------|--|--|
| 08:30-10:00 | Plenary Lecture (Room: Lecture Hall) | | | | |
| 08:30-09:00 | Geng-Dong Cheng | Physics and mathematics based mesh reduction | | | |
| | (Dalian University of Technology, China) | | | | |
| 09:00-09:30 | Jeng-Tzong Chen | Three detecting indexes and five regularization | Xiao-Wei Gao | | |
| 09.00-09.30 | (National Taiwan Ocean University) | techniques for degenerate scales in the BEM/BIEM | | | |
| 09:30-10:00 | Antonio Tadeu | Coupling the BEM and the MFS – wave propagation | | | |
| | (Pólo II da Universidade de Coimbra, Portugal) | and heat diffusion | | | |
| 10:00 - 10:20 | Tea Break | | | | |
| 10:20-11:50 | Plenary Lecture (Room: Lecture Hall) | | | | |
| 10:20-10:50 | Zhen-Han Yao | Some investigation on the accuracy of BE analysis | | | |
| | (Tsinghua University, Chian) | | Alex Cheng | | |
| 10:50-11:20 | Jian-Ming Zhang | An Automatic Simulation Tool for Thermal Analysis | | | |
| | (Hunan University) | of Gravity Dams by BFM | | | |
| 11:20-11:50 | Wenjing Ye | Boundary Element methods for Dynamic Structural | | | |
| | (Hong Kong University of Science and Technology) | Analysis | | | |
| 12:00-14:00 | Lunch & Rest | | | | |
| 14:00 - 17:30 | Parallel Sessions | | | | |
| 17:30 - 18:00 | EABE Board Meeting (Lecture Hall) | | | | |
| 18:00 - 20:00 | Banquet | | | | |

2013-10-23:

| 08:00-10:00 | Plenary Lecture (Ro | | | | | |
|---------------|---|---|--------------|--|--|--|
| 08:00-08:30 | Alex Cheng | Some Thoughts on Mesh Reduction and | | | | |
| | (University of Mississippi, USA) | Collocation Method | | | | |
| 08:30-09:00 | Chun-Ying Dong | Integral equation formulations in 2D | Zhen-Han Yao | | | |
| | (Beijing Institute of Technology, China) | inhomogeneous magnetoelectroelastic media | | | | |
| 09:00-09:30 | Hai-Bo Chen | FEM/Wideband FMBEM coupling to model | | | | |
| | (University of Science and Technology of China) | acoustic-structure interaction | | | | |
| 09:30-10:00 | Ernian Pan | Various Green's functions in anisotropic | | | | |
| | (The University of Akron, USA) | magnetoelectroelastic bimaterial spaces | | | | |
| 10:00 - 10:10 | Photogr | aphing | | | | |
| 10:10 - 10:30 | Tea Bre | Tea Break | | | | |
| 10:30 - 12:00 | Plenary Lecture (Ro | om: Lecture Hall) | | | | |
| 10:30-11:00 | Mou-Bin Liu | Recent improvements on SPH with applications | | | | |
| | (Institute of Mechanics, Chinese Academy of | to free surface and fluid-structure interaction | Jeng-Tzong | | | |
| | Sciences) | problems | Chen | | | |
| 11:00-11:30 | Dong-Dong Wang | Dynamic Analysis of Stabilized Meshfree | | | | |
| | (Xiamen University, China) | Method for Mindlin-Reissner Plate | | | | |
| 11:30-12:00 | Hai-Tao WANG | ACA-accelerated Time Domain BEM for 3-D | | | | |
| | (Tsinghua University, China) | Elastodynamics | | | | |
| 12:00-14:00 | I | Lunch & Rest | | | | |
| 14:00 - 18:00 | Parallel Sessions | | | | | |
| 18:00 - 19:30 | Dinner | | | | | |
| 20:00 - 22:00 | Panel discussion | | | | | |

2013-10-24:

| 08:00-10:00 | Plenary Lecture (Room: Lecture Hall) | | | | |
|---------------|---|--|-------------|--|--|
| 08:00-08:30 | Hang Ma | The eigen variable boundary integral equations | | | |
| | (Shanghai University, China) | with applications | | | |
| 08:30-09:00 | Huan-Lin Zhou | The PCGM for Cauchy inverse problems in 3D | Mou-Bin Liu | | |
| | (Hefei University of Technology, China) | potential | | | |
| 09:00-09:30 | Yao-Ming Zhang | A general algorithm for numerical evaluation of | | | |
| | (Shandong University of Technology, China) | early singular integrals over high-order eometry | | | |
| | | elements in 3D BEM | | | |
| 09:30-10:00 | Xiao-Wei Gao | A direct method for evaluating arbitrary high | | | |
| | (Dalian University of Technology, China) | order singular curved boundary integrals | | | |
| 10:00 - 18:00 | Sightseeing Tour | | | | |
| 10:00 - 11:00 | Going to Lvshun by bus | Going to Lvshun by bus | | | |
| 11:00 - 12:00 | Visiting naval port | | | | |
| 12:00 - 13:00 | Lunch | | | | |
| 13:00 - 17:00 | Visiting East Jiguan mountain & Lvshun museum | | | | |
| 17:00 - 18:00 | Going back to Dalian | | | | |

Two Parallel Sessions

2013-10-22: BEM etc.

| Time | Speaker | Affiliate | Title | Chair |
|-------------|---------------|--|---|------------------|
| 14:00-14:25 | Leevan Ling | Hong Kong Baptist University | Approximate fundamental solution for space-time fractional diffusion | |
| | (Invited) | | equation | |
| 14:25-14:50 | Taiyan Qin | China Agricultural University | A time domain BEM for transient dynamic straight crack in | Chun-Ying |
| | (Invited) | | piezoelectric solids | Dong |
| 14:50-15:10 | Yuan Li | Hunan University | A comparative study of time domain BEM for 3D elastodynamic analysis | |
| 15:10-15:30 | Hongmei Peng | Inner Mongolia University for | Influence of strut structure on hemodynamic characteristics by | |
| | | Nationalities | boundary elementary method | |
| 15:30-15:50 | Zhao Guo | Shanghai University | Solution of Stress Intensity Factors for 2-D Multiple Crack Problems by | |
| | | | the Fast Multipole Boundary Element Method | |
| 15:50-16:05 | Tea Break | | | |
| 16:05-16:30 | Zaiyou Yan | Nanjing University of | The pFFT accelerated BEM for the simulation of 3-D acoustic problems | |
| | (Invited) | Aeronautics and Astronautics | | |
| 16:30-16:50 | Yanchuang Cao | Northwestern Polytechnical University | A SVD accelerated kernel-independent fast multipole method and its application to BEM | Hong-Mei Peng |
| 16:50-17:10 | Jie Zhai | Tsinghua University | Regularization Fast Multipole Boundary Element Method for Potential | |
| | | | Flow Problems in 3D Vortex Method | |
| 17:10-17:30 | Guizhong Xie | Hunan University | Application of exponential transformation coupled with adaptive | |
| | | | subdivision technique for nearly singular boundary integrals in elasticity | |
| | | | problems | |
| 17:30-18:00 | | | EABE Board Meeting (Lecture Hall) | |

2013-10-22: Mesh Reduction Methods etc.

| Time | Speaker | Affiliate | Title | Chair |
|-------------|---------------|-------------------------|--|-------------------|
| 14:00-14:25 | Benny Hon | City University of Hong | Numerical methods for solving boundary value problems | |
| | (Invited) | Kong | | |
| 14:25-14:50 | Qinglin Duan | Dalian University of | Quadratically Consistent Integration Schemes For Element-Free Galerkin | <u>J</u> ian-Ming |
| | (Invited) | Technology | Method | Zhang |
| 14:50-15:10 | Wenting Shao | Tongji University | Chebyshev tau meshless method based on the highest derivative for solving a | |
| | | | class of two dimensional parabolic problems | |
| 15:10-15:30 | Chenjun Lu | Hunan University | Treatment for geometry noise in mesh generation for welded tubular Y-joints in BFM | |
| 15:30-15:50 | Zhaohui Xia | Huazhong University of | M2L optimization in FMBEM and its GPU Implementation | |
| | | Science and Technology | | |
| 15:50-16:05 | | | Tea Break | |
| 16:05-16:30 | Boyang Ding | Zhejiang University of | Dynamic Green's functions of a buried point load with applications to | |
| | (Invited) | Technology | drainage | |
| 16:30-16:50 | Mei Huang | North China Electric | Mixed boundary node method for free vibration analysis of rectangular plates | Dong-Dong |
| | | Power University, | with variable thickness and general boundary conditions | Wang |
| 16:50-17:10 | Shuaiping Guo | Hunan University | Multiple reciprocity boundary face method for transient heat conduction in | |
| | | | Functionally graded materials | |
| 17:10-17:30 | Bo Yu | Dalian University of | A time-domain precise BEM for solving transient heat conduction problems with | |
| | | Technology | variable heat conductivities | |
| 17:30-18:00 | | | EABE Board Meeting (Lecture Hall) | |

2013-10-23: BEM etc.

| Time | Speaker | Affiliate | Title | Chair |
|-------------|---------------|---------------------------|---|-------------|
| 14:00-14:25 | Qinghua Qin | The Australian National | Mesh reduction strategy: Special element for modelling anisotropic materials | |
| | (Invited) | University | with defects | |
| 14:25-14:50 | Xiaohua Zhang | China Three Geoges | The variational multiscale element free Galerkin method for the simulation of | Hai-Bo Chen |
| | (Invited) | University | power-law fluid flows | |
| 14:50-15:10 | Zhuojia Fu | Hohai University | Numerical investigation on three treatments for eliminating the singularities | |
| | | | of acoustic fundamental solutions in singular boundary method | |
| 15:10-15:30 | Hongyan Wang | Beijing University of | Static and dynamic fracture analysis in thin piezoelectric laminas by | |
| | | Technology | boundary element method | |
| 15:30-15:50 | Changjun | University of Science and | Acoustic eigenvalue analysis using a fast boundary element approach and a | |
| | Zheng | Technology of China | contour integral method | |
| 15:50-16:15 | | | Tea Break | |
| 16:15-16:40 | Changzheng | Hefei University of | The variational multiscale element free Galerkin method for the simulation of | |
| | Cheng | Technology | power-law fluid flows | |
| | (Invited) | | | Zhuo-Jia Fu |
| 16:40-17:00 | Kai Yang | Dalian University of | Thermal stress analysis of functionally graded material structures using | |
| | | Technology | analytical expressions in radial integration BEM | |
| 17:00-17:20 | Jinlong Feng | Tsinghua University | 3D acoustic wave simulation using BEM formulations and ACA algorithm | |
| 17:20-17:40 | Shen Qu | Dalian University of | Adaptive integration technique for nearly singular integrals in near-field | |
| | | Technology | acoustics boundary element analysis | |
| 17:40-18:00 | Xianghe Li | Hunan University | The Application of Multi-domain Boundary Face Method in Steady State Heat Conduction Problem | |

2013-10-23: Mesh Reduction Methods etc.

| Time | Speaker | Affiliate | Title | Chair |
|-------------|---------------|--------------------------|--|-----------|
| 14:00-14:25 | Tzon-Tzer Lu | National Sun Yat-sen | Super-geometric Convergence of Trefftz Method for Helmholtz Equation | |
| | (Invited) | University | | |
| 14:25-14:50 | Hui Wang | Henan University of | Influence of packing dimension in doubly-periodic composites on effective | Ming-Gong |
| | (Invited | Technology | thermal properties by super hybrid finite element with boundary integrals | Lee |
| 14:50-15:10 | Xingshuai | Hunan University | A Geometric Cross Approximation Method | |
| | Zheng | | | |
| 15:10-15:30 | ZATIANINA | Hohai University | Numerical comparison on two boundary meshless methods for water wave | |
| | Razafizana | | problems | |
| 15:30-15:50 | Zhongxian Liu | Tianjin Chengjian | The MFS solution to 3-D scattering of elasitic waves in layered half space | |
| | | University | | |
| 15:50-16:15 | | | Tea Break | |
| 16:15-16:40 | Andong Gong | Central South University | Analytical integrations of linearly interpolated triangular BEM element with | |
| | (Invited) | | the aid of Matlab symbolic math toolbox | |
| 16:40-17:00 | Ming-Gong Lee | Chung Hua University | Null Field and Interior Field Methods for Laplace's equation in circular | Chang-Jun |
| | | | domains with very small holes | Zheng |
| 17:00-17:20 | Cheng Huang | Hunan University | Automatic Hybrid Mesh Generation for Boundary Face Method | |
| 17:20-17:40 | Jin-Xiu Hu | Dalian University of | Numerical evaluation of high order singular boundary integrals using | |
| | | Technology | third-degree B-Spline basis functions | |
| 17:40-18:00 | | | | |