

5th Trends in Unstructured Mesh Generation

Session 1: Hexahedral Meshing		
1	Hexahedral Mesh Generation Constraints	Jason Shepherd University of Utah jfsheph@sandia.gov
2	An Attempt to Develop an Automatic Hexahedral Mesh Generator with Modification Procedure of Surface Quadrilateral Mesh and Improved Whisker Weaving Method	Yasumi KAWAMURA Yokohama National University yas@structlab.shp.ynu.ac.jp
3	Constrained Hexahedral Mesh Optimization on Boundary	Jun Yin R&D Division yin@astom.co.jp
4	Physically-Based Line Networking for Adaptive Cubical-Dominant Mesh Generation	Ko-Foa Tchon Ecole Polytechnique de Montreal ko-foa.tchon@polymtl.ca
5	The Mathematical Relationships Between a Shape Representation and its Hexahedral Meshes	Jon Aus IT Consultant jonaus@opar.ltd.uk
Session 2: Adaptive Methods		
1	Quadrilateral/Hexahedral Mesh Coarsening	Matthew Staten Sandia National Laboratory mlstate@sandia.gov
2	A COMPARATIVE STUDY OF FINITE ELEMENT ACCURACY COMPARED TO ELEMENT QUALITY OF ELASTIC QUADRILATERALS	Steven Benzley Brigham Young University seb@byu.edu
3	Method for Geometry-based Adaptive Finite Element Mesh Generation	Du Qungui College of Automotive Engineering ctqgdu@scut.edu.cn
4	Numerical Optimization Algorithms for Optimal Point Placement	Alexandre Cunha University of California, Los Angeles cunha@ucla.edu
5	EFFICIENT AUTOMATIC ELEMENT SIZE SPECIFICATION WITH GRADIENT CONTROL FOR UNSTRUCTURED GRID GENERATION	Aristotelis Athanasiadis Vrije Universiteit Brussel ariathan@vub.ac.be
Session 3: Applications of Mesh Generation		
1	The use of anisotropic unstructured mesh optimization methods in oceanography	Matthew Piggott Imperial College London m.d.piggott@imperial.ac.uk
2	Unstructured meshes for flow simulation in fractured porous media	Sylvia Moenickes Technical University Carolo-Wilhelmina s.moenickes@tu-bs.de
3	ADAPTIVE TETRAHEDRAL ELEMENT GENERATION FOR BULK METAL FORMING SIMULATION CONSIDERING THE DIE GEOMETRY AND THE MATERIAL STATE	Man Soo Joun Gyeongsang National University msjoun@gsnu.ac.kr
4	Hybrid Meshes for Reservoir Flow Simulation	Chakib Bennis IFP Chakib.Bennis@ifp.fr

5	GEOMETRIC MODELING OF TREE STEM DEFORMATIONS	Nancy Hitschfeld U. de Chile nancy@dcc.uchile.cl
Session 4: Parallel Applications		
1	Parallel 3D Delaunay Mesh Generation	Yao Zheng Zhejiang University yao.zheng@zju.edu.cn
2	Implementation of an affected-zone based parallel 3D Delaunay triangulation method	Min-Bin Chen Assistant Professor cmb@cute.edu.tw
3	Challenges in Parallel Meshing of Evolving Geometries	Damrong Guoy University of Illinois at Urbana-Champaign guoy@uiuc.edu
4	Adaptive boundary layer meshing for viscous flow simulations	Onkar Sahni Rensselaer Polytechnic Institute osahni@scorec.rpi.edu
Session 5: Discrete and Hybrid Methods		
1	Radiant points mesh generator	Juan Almara AMCA almara@usa.com
2	Crest line extraction for parametric surface meshing	Boris CLEMENCON DASSAULT AVIATION boris.clemencon@inria.fr
3	Adaptive Surface Meshing Using Visualization Facets	Xiangrong Li SolidWorks Corporation xli@solidworks.com
4	An Strategy to Convert Unstructured Meshes into Polyhedral Meshes	Thomas Gessner Fluent Inc. tg@fluent.com
5	Optimal Node-Centered Control Volume Tessellation for Hybrid Meshes	Andrey Mezentsev Imperial College London A.Mezentsev@tiscali.co.uk
Session 6: Geometry and CAD		
1	Surface Mesh Generation via Chordal Axis Transformation from 3D Thin Solid Models	Soo-Won Chae Korea University swchae@korea.ac.kr
2	AN APPROACH FOR EXTRACTING NON-MANIFOLD MID-SURFACE OF THIN-WALL SOLIDS USING CHORDAL AXIS TRANSFORM	William Quadros ALGOR, Inc. wrquadros@algor.com
3	jCAE - A java based framework for CAE applications	Guillaume Alleon EADS guillaume.alleon@eads.net
4	LMS HMesh: Automatic Mesh Generation for Complex CAD Assemblies	Iulian Grindeanu LMS International iulian.grindeanu@lmscae.com