

Tuesday, 5 June 2012

17:30 Welcome reception Barbecue grill with veggie part until ca. 20:00



Wednesday, 6 June 2012

08:00 Reception / registration

08:45 Opening address **Ulrich Weidmann**

09:00 Opening presentation **Urs Walter**

09:30 Keynote **Peter Jenkins**
"Shaping the space: turning function into inspiration"

10:00 Parallel sessions	Theme: Modeling	Theme: Evacuation	Theme: Experiments
	Chair: H. Klüpfel	Chair: M. Moussaïd	Chair: A. Johansson

A.1
T. Kretz
"The Effect of Integrating Travel Time"

B.1
G. Bernardini
"Analysis of pre-movement times for the evacuation of university classrooms in the event of fire"

C.1
C. Appert-Rolland
"Experimental study of pedestrian dynamics"

A.2
V. Reuter
"On modeling groups in crowds: empirical evidence and simulation results including large groups"

B.2
A. Dederichs
"Simulex simulations on the evacuation of day-care centres for children 0-6 years"

C.2
L. Bourgois
"Pedestrian agent based model suited to heterogeneous interactions overseen by perception"

A.3
G. Köster
"Validation of crowd models including social groups"

B.3
E. Galea
"Modelling Evacuation using Escalators: A London Underground Dataset"

C.3
J. Dijkstra
"Measuring Individual's Egress Preference in Wayfinding through Virtual Navigation Experiments"

11:10 Coffee Break

11:40 Parallel Sessions	Theme: Evacuation	Theme: Experiments / Basic concepts	Theme: Psychology
	Chair: H. Klüpfel	Chair: M. Moussaïd	Chair: A. Johansson
	A.4 E. Galea "An Evacuation Validation Data Set for Large Passenger Ships"	B.4 M. Nasir "Fuzzy Prediction of Pedestrian Steering Behaviour with Local Environmental Effects"	C.4 L. Künzer "Psychological Aspects of German Signal Words in Evacuation Warnings"
A.5 H. Mayer "Influence of Emissions on Pedestrian Evacuation"	B.5 E. Kirik "Fundamental diagram as a model input – direct movement equation of pedestrian dynamics"	C.5 T. Takahashi "Effect of guidance information and human relations among agents on crowd evacuation behavior"	
A.6 C. Rogsch "RiMEA - A Way To Define A Standard For Evacuation Calculations"	B.6 F. Zanlungo "Experimental study and modelisation of pedestrian space occupation and motion pattern in a real world environment"	C.6 F. Cabrera "Using the social force model to represent the behavior of pedestrians at chaotic intersections of developing countries: the case of Peru"	
13:00 Lunch break			
14:30 Keynote	Marjolein de Jong "The characteristics and needs of pedestrians with mobility impairments - How to move around comfortably and safely with a reduced ability to walk, see, hear, feel or process information"		

15:00 Parallel sessions	Theme: Modeling	Theme: Modeling	Theme: Modeling	
	Chair: E. Galea	Chair: T. Kretz	Chair: U. Weidmann	
	A.7 M. Schultz "Stochastic transition model for pedestrian dynamics"	B.7 D. Hartmann "Dynamic medium scale navigation using dynamic floor fields"	C.7 M. Chraibi "A simplified force model and enhanced steering for a quantitative description of pedestrian dynamics"	
	A.8 T. Fujiyama "The effects of the design factors of the train-platform interface on pedestrian movements"	B.8 P. Townsend "Pedestrian Gap Acceptance in Micro-Simulation Modelling"	C.8 M. Campanella "Quantitative and Qualitative Validation for General Use of Pedestrian Models"	
	A.9 D. Bauer "Including Route Choice Models into Pedestrian Movement Simulation Models"	B.9 F. Huth "A Macroscopic Multiple Species Pedestrian Flow Model Based on Heuristics Implemented with Finite Volumes"	C.9 N. Reddy "FDS+Evac Model Validation for Seated Row Arrangements"	
	16:10 Coffee break			
	16:40 Keynote	Uwe Hanebeck "Multimodal Extended Range Telepresence in Pedestrian Simulation"		
	17:10 Parallel sessions	Theme: Experiments / Basic concepts	Theme: Modeling	
		Chair: E. Galea	Chair: T. Kretz	
A.10 M. Plaue "On measuring pedestrian density and flow fields in dense as well as sparse crowds"		B.10 K. Rio "A data-driven model of pedestrian following and emergent crowd behavior"		
A.11 S. Bonneaud "An empirically-grounded emergent approach to modeling pedestrian behavior"		B.11 C. Rudloff "Comparison of different Calibration Techniques on Simulated Data"		
A.12 S. Burghardt "Fundamental diagram of stairs: Critical review and topographical measurements of density and flow"	B.12 M. Schultz "Group dynamic behavior and psychometric profiles as substantial driver for pedestrian dynamics"			

18:20 Evening
buffet

20:00 Evening presentation /
press event **Thomas Brudermann**
"Mass psychology revisited -
Insights from Social
Psychology, Neuroscience and
Simulation"

Thursday, 7 June 2012

08:00 Reception /
registration

09:00 Keynote **Paul I. Weinmann**
"Behavior Assessment of
Individuals in Crowds - a View
from the Perspective of
Aviation and Airport Security"

09:30 Parallel sessions	Theme: Simulation	Theme: Simulation	Theme: Simulation
	Chair: C. Appert-Rolland	Chair: U. Weidmann	Chair: C. Kemp
	A.13 R. Jobanputra "The Development and Calibration of an Agent-based Microsimulation Model to Simulate Vehicle-Pedestrian Interaction"	B.13 H. Schrom-Feiertag "Simulation of Handicapped People Finding their Way Through Transport Infrastructures"	C.13 J. Pettré "Velocity-based models for crowd simulation"
A.14 H. Aydt "Symbiotic Simulation for Egress Optimisation in Smart Buildings"	B.14 M. Davidich "Calibration and validation of pedestrian simulations against real live scenarios based on video data: Example of a German railway station"	C.14 D. Duives "Analysis of Pedestrian Self- organizing Crowd Movements at a Music Festival"	
A.15 C. Dobler "Integration of a microscopic force-based 2D pedestrian simulation into a framework for large-scale transport systems simulation"	B.15 T. Osaragi "Simulation Model of Evacuation Behavior Following a Large-scale Earthquake that Takes into Account Various Attributes of Residents and Transient Occupants"	C.15 G. Bärwolff "Methods for modeling and simulation of multi-destination pedestrian crowds"	

10:40 Coffee break

11:10 Poster
session see poster exhibition plan for
details

12:30 Lunch break

- 14:00** Keynote **Mehdi Moussaïd**
"The modeling of human crowd behavior: Where physics meets cognitive science"
- 14:30** Parallel sessions
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|---|---|
| Theme: Experiments | Theme: Modeling |
| Chair: C. Appert-Rolland | Chair: M. Schreckenberg |
| A.16
A. U. Kemloh Wagoum
"Empirical Study and Modelling of Pedestrians' Route Choice in a Complex Facility" | B.16
G. Lämmel
"Getting out of the way: collision avoiding pedestrian models compared to the real world" |
| A.17
P. Tofilo
"Staircase evacuation with firefighters counter flow - experimental data and output from popular modeling software" | B.17
I. Martínez
"Methodology for Pedestrian Simulation with Complex/Random Routes in Public Spaces" |
| A.18
R. Zinke
"Psychological aspects of human dynamics in underground evacuation: field experiments" | B.18
L. Adiaviakoye
"Collection of data stemming from the fine trajectory of the pedestrians" |
- 15:40** Coffee break
- 16:10** Keynote **Chris Kemp**
"New developments in crowd management, safety and dynamics - Managing risk for safer crowded places"
- 16:40** Special session **Dinesh Manocha and Mubarak Shah**
"Computer vision, graphics and robotics"
- 17:50** Break
- 19:30** Social event / conference dinner Summer night boat cruise with dinner on Lake Zug **(shuttle bus departs at 18:15h** from the conference venue; return to Zurich ca. 23:30h) Guided walking tour Zürich with reception

Friday, 8 June 2012

- 08:00** Reception / registration

09:00 Keynote	Andrew Hutton "London Bridge – the significant role ped modelling plays in designing the new station and how to deliver it"		
09:30 Parallel sessions	Theme: Evacuation Chair: T. Brudermann A.19 H. Klüpfel "PedGo Guardian: an Assistant for Evacuation Decision Making" A.20 Q. Li "Ant colony based evacuation optimization algorithm for mixed vehicle-pedestrian flows" A.21 K. L. Marsh "Crowd Guidance in Building Emergencies: Using Virtual Reality Experiments to Confirm Macroscopic Mathematical Modeling of Psychological Variables"	Theme: Modeling Chair: P. I. Weinmann B.19 A. Johansson "Utilizing Crowd Insights to Refine Disease-Spreading Models" B.20 S. Curtis "Pedestrian Simulation using Geometric Reasoning in Velocity Space" B.21 D. Yanagisawa "Influence of Rhythm and Velocity Variance on Pedestrian Flow"	Theme: Evacuation Chair: M. de Jong C.19 T. Chen "Study of human behaviour before evacuation" C.20 E. Miller-Hooks "Modeling Pedestrian Route Choice during Large Public Gatherings" C.21 A. Mordvintsev "Simulation of City Evacuation Coupled to Flood Dynamics"
10:40 Coffee break			
11:10 Panel discussion	Presenter: E. Galea Cecile Appert-Rolland Anders Johansson Marjolein de Jong Paul Townsend		
12:00 Final remarks	Ulrich Weidmann Michael Schreckenberg		
12:30 End of conference			

- P.1 **S. Nowak** "A cellular automaton model for lane formation in bidirectional pedestrian flow"
- P.2 **C. Appert-Rolland** "A macroscopic model for bidirectional pedestrian flow"
- P.3 **C.-S. Ahn** "A Study for Ventilation Capacity of Large Enclosure Considering Real Fire Load"
- P.4 **D. Shin** "Activity Classification and User Interface Design for a Crowdsourcing Urban Simulation Platform Using Mobile Devices"
- P.5 **G. Walenciak** "Agent-based Modelling and Evacuation Simulation for Disaster Preparedness and Management"
- P.6 **D. Samuelson** "Agent-Based Simulations of Pedestrian Movement for Site Security: U. S. Secret Service's Current Capabilities and Next Steps"
- P.7 **D. Fukuda** "An econometric based pedestrian walking behaviour model implicitly considering strategic or tactical decisions"
- P.8 **V. Viswanathan** "An Information-Based Model of Pre-evacuation Behavior for Agent Based Egress Simulation"
- P.9 **S. Katsoulis** "An innovative Evacuation System for Multiplex Cinemas: Case Study VILLAGE ROADSHOW GROUP OF COMPANIES - Athens - Greece"
- P.10 **A. Gorrini** "An innovative scenario for pedestrian data collection: the observation of an admission test at the University of Milano-Bicocca"
- P.11 **S. Burghardt** "Analysis of flow-influencing factors in mouths of grandstands"
- P.12 **K. Rahman** "Analysis of Pedestrian Walking Speed in a Developing Country: A Factorial Design Study"
- P.13 **T. Rinne** "Bottlenecks in evacuation design considering both structural and human behavioural aspects: An experimental study"
- P.14 **W. Abu Abed** "Cognition-oriented Simulation of Pedestrian Dynamics: Perceptually Driven Social Force Model"
- P.15 **B. Forell** "Comparison of Evacuation Simulation Models"
- P.16 **M. Lopusniak** "Comparison of Simulation Results with Evacuation Test and Normative Calculation"
- P.17 **A. Kamyshnikov** "Computational complexity and parallel computing in discrete-continuous SIGMA.DC pedestrian movement model"
- P.18 **J.-Y. Kim** "Development of Smoke Control System Ensuring Safe Evacuation through Stairwell in High-Rise Building in Korea"

- P.19 **G. Wurzer** "Early-Stage Egress Simulation for Process-Driven Buildings"
- P.20 **R. Könnecke** "Effect of social groups on crowd dynamics - empirical findings and numerical simulations"
- P.21 **J. Zhang** "Empirical relations for bidirectional pedestrian stream in a corridor"
- P.22 **R. J. Galiza** "Estimating PCE-Type Factors for Heterogeneous Pedestrian Traffic Using Simulation"
- P.23 **W. Alhalabi** "Evacuating a Large Scale Building: a Holy Mosque in Makkah as a case study"
- P.24 **T. Kaneda** "Evacuation Agent Simulation in Underground Shopping Street adding Floor Field Approach and Its Three Dimensional Expression"
- P.25 **S. Hebben** "Evacuation Analysis for Venues"
- P.26 **S. Kühn** "Evacuation Dynamics influenced by spreading hazardous material"
- P.27 **P. Gessler** "Evacuation Exercise for a TV Studio - Comparison to Simulation Results"
- P.28 **X. Qu** "Experimental Study of the Passengers' Self-learning in Spatial Structure of Urban Mass Transit Stations with Cognitive Map"
- P.29 **J. Cividini** "Frozen shuffle update in simple geometries: a first step to simulate pedestrians"
- P.30 **S. Holl** "HERMES – An evacuation assistant for large arenas"
- P.31 **S. Kitov** "Improving Flexibility of Agent's Path Selection in Cellular Pedestrian Flow Model"
- P.32 **B. Krausz** "Integrating lateral swaying of pedestrians into simulations"
- P.33 **W. Daamen** "Interaction behaviour between individual pedestrians"
- P.34 **K. Schatz** "Investigating human factors in fire evacuation – a serious-gaming approach"
- P.35 **D. Durst** "Large-scale Multi-Modal Evacuation Analysis with an Application to Hamburg"
- P.36 **D. Weber** "Merging of pedestrian queues: a mean field approach for CA models"

- P.37 **A. S. Sahaleh** "Microscopic Calibration and Validation of Pedestrian Models: Integrating discrete choice model into social force model"
- P.38 **M. Seitz** "Modelling pedestrian group behavior in a cellular automaton"
- P.39 **J. Dijkstra** "Modelling Time Duration of Planned and Unplanned Store Visits in a Multi-Agent Simulation of Pedestrian Activity in City Centres"
- P.40 **K. Kostas** "Motions effect for crowd modeling aboard ships"
- P.41 **C. Thornton** "New Wayfinding Techniques in Pathfinder and Supporting Research"
- P.42 **M. Almejmaj** "Observations from Student Exercises and Proposed Experimental Scenarios for Human Behavior Data Collection"
- P.43 **N. Cakici Alp** "Occupants Emergency Behaviour in Turkey"
- P.44 **S. B. Liu** "On the simulation for rail tunnel evacuation with cross-passageways"
- P.45 **M. Chraibi** "OpenPedSim: A Framework for Pedestrian Flow Analysis"
- P.46 **X. Xu** "Optimal exit choice algorithm for pedestrian evacuation dynamics"
- P.47 **M. Swenne** "Optimizing Pedestrian Environments with Evolutionary Strategies"
- P.48 **A. Aljohani** "Pedestrian crowd dynamics during pilgrimage"
- P.49 **A. Danalet** "Pedestrian Map Matching using WiFi Traces"
- P.50 **M. Di Mauro** "Pedestrian-vehicles interaction during evacuation: agent-based hybrid evacuation modelling of Southeast Asian cities"
- P.51 **C. Eilhardt** "Phase Separation in Pedestrian Traffic: An approach to modelling"
- P.52 **J. Choi** "Revision of Pedestrian Levels of Service Values Based on Pedestrian Conflicts"
- P.53 **K. Yasufuku** "Scalable Evacuation Simulation and Visualization Using GPU Computing"
- P.54 **B. Anvari** "Shared Space Simulation Based on Social Forces and Distance Potential Field"

- P.55 **C. Pretto** "Simulation Model for Vehicle and Pedestrian Interaction Considering Road Crossing Activities"
- P.56 **H. Hakonen** "Simulation Models of Merging Priorities in Staircases"
- P.57 **M. Chen** "Simulation of Pedestrian Dynamics with Density Control on a Regular Grid"
- P.58 **H. Klüpfel** "Specific Requirements for the Egress Simulation of Large Scale Outdoor Events"
- P.59 **A. Tomoeda** "Starting-wave and Optimal Density in a Queue"
- P.60 **H.-H. Tian** "The Lattice Hydrodynamic Model Considering the Human Subconscious Behavior for the Counter Flow"
- P.61 **H. Klüpfel** "The Loveparade Tragedy 2010 – Causes and Consequences"
- P.62 **K. Zhu** "The non-symmetrical choice behavior during evacuation experiments in building with multi-obstacle"
- P.63 **M. Boltes** "Tracking People in Crowded Scenes"
- P.64 **N. Shiwakoti** "Understanding crowd panic at turning and intersection through model organisms"
- P.65 **B. Sirmacek** "Understanding social behaviors of pedestrian crowds in airborne images based on a graph-cut and sub-graph matching based framework"
- P.66 **A. Kneidl** "Using a multi-scale model for simulating pedestrian behavior"
- P.67 **E. Ronchi** "Validation and Calibration of the EXIT89 Evacuation Model for Road Tunnel Evacuation Applications"
- P.68 **M. Kaitsuji** "Venue Suitability for Large-Scale Events from the Standpoint of Crowd Safety"
- P.69 **M. Davidich** "Waiting zone for real life scenarios. Example a German railway station"
- P.70 **S. Münchow** "WALK: A Modular Testbed for Crowd Evacuation Simulation"