ACM/IEEE 12th Annual International Conference on

Model Driven Engineering Languages and Systems

MODELS 2009

Denver, Colorado, USA

October 4 – 9, 2009

Photograph courtesy of Denver Metro Convention Visitors Bureau

MODELS 2009 – Program at a Glance – Workshops and Tutorials[1]

Time	Sunday October 4	Monday October 5		Tuesday October 6		
	Workshops	**Workshops**	**Symposia**	**Workshops**	**Symposia**	**Tutorials**
8:00 – 8:30	**On-site registration** Mesa Verde Foyer (ground floor in front of conference rooms)					
8:30 – 10:00	**AOM** Wind River **MoDSE-MCCM** Chasm Creek B **NFPinDMSL** Wind Star **TWOMDE2009** Chasm Creek A	**Models@run.time** Chasm Creek B **MoDeVVa09** Wind River **OCL** Wind Star	**Doctoral Symposium** Mesa Verde A	**ACES-MB'09** Chasm Creek A **FOSD** Chasm Creek B **MPM09** Wind River	**Educators' Symposium** Wind Star	**T4: MDE4DRE-QoS** Mesa Verde A
10:00 – 10:30	**Coffee Break** Mesa Verde Foyer	**Coffee Break** Mesa Verde Foyer		**Coffee Break** Mesa Verde Foyer		
10:30 – 12:30	**AOM** **MoDSE-MCCM** **NFPinDMSL** **TWO MDE2009**	**Models@ run.time** **MoDeVVa09** **OCL**	**Doctoral Symposium**	**ACES-MB'09** **FOSD** **MPM09**	**Educators' Symposium**	**T4: MDE4DRE-QoS**
12:30 – 2:00	**Lunch** Atrium (2nd floor)	**Lunch** Atrium (2nd floor)		**Lunch** Atrium (2nd floor)		
2:00 – 3:30	**AOM** **MoDSE-MCCM** **NFPinDMSL** **TWO MDE2009**	**Models@ run.time** **MoDeVVa09** **OCL**	**Doctoral Symposium**	**ACES-MB'09** **FOSD** **MPM09**	**Educators' Symposium**	**T5: MDLE** Mesa Verde A
3:30 – 4:00	**Coffee Break** Mesa Verde Foyer	**Coffee Break** Mesa Verde Foyer		**Coffee Break** Mesa Verde Foyer		
4:00 – 6:00	**AOM** **MoDSE-MCCM** **NFPinDMSL** **TWO MDE2009**	**Models@ run.time** **MoDeVVa09** **OCL**	**Doctoral Symposium**	**ACES-MB'09** **FOSD** **MPM09**	**Educators' Symposium**	**T5: MDLE**
6:30 – 8:00		**Workshop/Tutorial/Co-located Conferences Reception** Atrium (2nd floor)				

Workshops:	
ACES-MB'09: Model Based Architecting and Construction of Embedded Systems	MoDSE-MCCM: Models and Evolution
AOM: Aspect Oriented Modeling	MPM09: Multi-Paradigm Modeling
FOSD: Feature-Oriented Software Development	NFPinDMSL: Non-Functional System Properties in Domain Specific Modeling Languages
Models@run.time	OCL: The Pragmatics of OCL and Other Textual Specification Languages
MoDeVVa09: Model-driven Engineering, Verification, and Validation: Integrating Verification and Validation in MDE	TWOMDE2009:Transformation and Weaving OWL Ontologies and MDE/MDA
Tutorials:	
T4: MDE4DRE-QoS: Model-Driven Engineering for Quality of Service Provisioning in Distributed Real-time and Embedded Systems	T5: MDLE: Model Driven Language Engineering

[1] Please see **GPCE** (Generative Programming and Component Engineering) and **SLE** (Software Language Engineering) co-located conference programs for session details.

MODELS 2009 - Program at a Glance – Main Conference

Time	Wednesday October 7			Thursday October 8			Friday October 9		
8:30 – 9:00	**On-site registration** Mesa Verde Foyer (ground floor in front of conference rooms)								
9:00 – 9:15	**Opening remarks** Grand Mesa			**Announcements** Grand Mesa			**MODELS 2010 & Announcements** Grand Mesa		
9:15 – 10:30	**Keynote: Stephen J. Mellor** **Models. Models. Models. So What?** Jean Bézivin, Session Chair Grand Mesa			**Keynote: Larry L. Constantine** **Interaction Design and Model-Driven Development** Robert France, Session Chair Grand Mesa			**Keynote: Grady Booch** **Architectural Mining: The Other Side of the MDD** Gregor Engels, Session Chair Grand Mesa		
10:30 – 11:00	**Coffee Break** Grand Mesa pre-function area			**Coffee Break** Grand Mesa pre-function area			**Coffee Break** Grand Mesa pre-function area		
11:00 – 12:30	**1a: (Meta) Model Modeling and Management** Wind River	**1b: Quantitative Modeling with UML** Wind Star	**1c: Model Transformations and Constraints** Highlands	**4a: Language Specification and Annotation** Wind River	**4b: Domain-Specific Languages** Wind Star	**4c: Model-Based Analysis** Highlands	**6a: Genericity and Constraints** Wind River	**6b: Variability Management** Wind Star	**6c: Model Transformation Engineering** Highlands
12:30 – 2:00	**Lunch** Grand Mesa A/B/C			**Lunch** Grand Mesa A/B/C					
2:00 – 3:30	**2a: Model Management** Wind River	**2b: UML in Practice and Quality Assurance** Wind Star	**2c: Formalization of Model Transformations** Highlands	**5a: Model (De-) Composition and Abstraction** Wind River	**5b: Distributed Software Development** Wind Star	**5c: Service and Business Process Integration** Highlands			
3:30 – 4:00	**Coffee Break** Grand Mesa pre-function area			**Coffee Break** Grand Mesa pre-function area					
4:00 – 5:00	**3a: Scenario Modeling** Wind River	**3b: Business Application Development** Wind Star	**3c: Model Synchronization and Change Propagation** Highlands	**Panel: Real Programmers Don't Model** Øystein Haugen, Session Chair Grand Mesa					
5:00 – 5:15									
5:15 – 6:00									
6:00 – 8:30	**MODELS 2009 Conference Reception** Centennial (12th floor)			**MODELS 2009 Conference Banquet** Denver Downtown Aquarium					
8:30 – 10:00									

Welcome to MODELS 2009 – by Sudipto Ghosh & Rob Pettit

On behalf of the entire conference committee, we would like to welcome you to the MODELS 2009 conference. This year we have expanded the scope of the conference to include several new exciting and thought-provoking topics. We hope that you have a productive time at the conference, and that you enjoy the venue and social events we have planned. Some of the highlights this year include:

- Keynote speeches by Stephen Mellor, Larry Constantine, and Grady Booch.
- Scientific and Empirical Results papers: papers that describe innovative research and papers that focus on reporting project experience with model-driven development. All papers have undergone a rigorous review process. Each track had a dedicated program committee. Several members of the Scientific Track program committee served on the Empirical Results committee.
- An Educators' Symposium to provide a forum for educators and trainers to meet and discuss their ideas and experience teaching modeling techniques and model-driven development.
- A Doctoral Symposium to provide mentoring and guidance regarding dissertation research and beginning a research career, as well as an international forum for interacting with other students and faculty.
- Exhibits that demonstrate on-going research and application of that research.
- Best Paper Award; the conference program includes 45 full and 13 short scientific and empirical papers. Of these, the difficult task of choosing the best paper fell to the Program Chairs. Thank you to all who submitted papers, and to the Program Committee who spent many hours reviewing them.
- The Most Influential Paper Award; a committee of prior conference and program chairs worked to pick the most influential paper from UML 1999. This paper is chosen from the conference papers of 10 years ago, based on its continued influence in our field.

In particular, we would like to thank The Aerospace Corporation for their generous contributions to the conference, and Springer for their sponsorship of the Best Paper and Most Influential Paper Awards. We would also like to thank MODELPLEX for their demonstrations, and our academic sponsors at Colorado State University for their administrative support.

Sudipto Ghosh and Rob Pettit
General co-chairs

Conference Details – Wednesday, October 7

9:00 – 9:15	**MODELS 2009 Opening Remarks** (Grand Mesa)		
9:15 – 10:30	**Keynote: Stephen J. Mellor - Models, Models, Models. So What?** Jean Bézivin, Session Chair (Grand Mesa)		
10:30- 11:00	**MODELPLEX Demonstration** **Coffee Break** (Grand Mesa pre-function area)		
Room:	**Wind River**	**Wind Star**	**Highlands**
11:00 – 12:30	**(Meta-)Model Modeling and Management** (1a) Jean-Marie Favre, Session Chair Muller, Fondement, Baudry *Modeling Modeling* (Scientific) Aschauer, Dauenhauer, Pree *Representation and Traversal of Large Clabject Models* (Scientific) Sen, Moha, Baudry, Jezequel *Meta-model Pruning* (Scientific)	**Quantitative Modeling with UML** (1b) Sébastien Gérard, Session Chair Shousha, Briand, Labiche *A UML/MARTE Model Analysis Method for Detection of Data Races in Concurrent Systems* (Scientific) Boskovic, Hasselbring *Model Driven Performance Measurement and Assessment with MoDePeMART* (Scientific) Lloyd, Jürjens *Security Analysis of a Biometric Authentication System using UMLsec and JML* (Empirical)	**Model Transformations and Constraints** (1c) Thomas Weigert, Session Chair Chenouard, Jouault *Automatically Discovering Hidden Transformation Chaining Constraint* (Scientific) Horváth, Varró *CSP(M): Constraint Satisfaction Problem over Models* (Scientific) Kleiner, Albert, Bezivin *Parsing SBVR-based Controlled Languages* (Empirical)
12:30 – 2:00	**Lunch** (Grand Mesa A/B/C)		
2:00 – 3:30	**Model Management** (2a) Jon Whittle, Session Chair Thum, Schwind, Schader *SLIM - A Lightweight Environment for Synchronous Collaborative Modeling* (Scientific) Gerth, Küster, Engels *Language-Independent Change Management of Process Models* (Scientific) Bendix, Emanuelsson *Requirements for Practical Model Merge - an Industrial Perspective* (Empirical)	**UML in Practice and Quality Assurance** (2b) Antonio Vallecillo, Session Chair Nugroho, Chaudron *Evaluating the Impact of UML Modeling on Software Quality: An Industrial Case Study* (Empirical) Pareto, Eriksson, Ehnebom *Concern Visibility in Base Station Development - an Empirical Investigation* (Empirical) Weißleder *Influencing Factors in Model-Based Testing with UML State Machines: Report on an Industrial Cooperation* (Empirical)	**Formalization of Model Transformations** (2c) Pierre-Alain Muller, Session Chair Jurack, Taentzer *Towards Composite Model Transformations using Distributed Graph Transformation Concepts* (Scientific) Ehrig, Ermel, Hermann, Prange *On-the-Fly Construction, Correctness and Completeness of Model Transformations based on Triple Graph Grammars* (Scientific) De Lara, Guerra *Formal Support for QVT-Relations with Coloured Petri Nets* (Scientific)
3:30 – 4:00	**Coffee Break** (Grand Mesa pre-function area)		
4:00 – 5:30	**Scenario Modeling** (3a) Richard Paige, Session Chair Brosch, Kappel, Langer, Seidl, Wieland, Wimmer, Retschitzegger, Schwinger *An Example is Worth a Thousand Words: Composite Operation Modeling By-Example* (Scientific) Mussbacher, Amyot, Whittle *Refactoring-Safe Modeling of Aspect-Oriented Scenarios* (Scientific) Maoz, Metsä, Katara *Model-Based Testing Using LSCs and S2A* (Empirical, 15 min presentation)	**Business Application Development** (3b) Alfonso Pierantonio, Session Chair Mohan, Kulkarni *Model Driven Development of Graphical User Interfaces for Enterprise Business Applications - Experience, Lessons Learnt and a Way Forward* (Empirical) Mazanek, Minas *Business Process Models as a Showcase for Syntax-based Assistance in Diagram Editors* (Scientific) Milanovic, Gasevic, Wagner, Hatala *Rule-enhanced Business Process Modeling Language for Service Choreographies* (Scientific, 15 min presentation)	**Model Synchronization and Change Propagation** (3c) Ivan Porres, Session Chair Ráth, Varró, Varró *Change-driven Model Transformations* (Scientific) Wolfe, Graham, Phillips *An Incremental Algorithm for High-Performance Runtime Model Consistency* (Scientific) Helming, Koegel, Naughton, David, Shterev *Traceability-based Change Awareness* (Scientific, 15 min presentation)

Conference Details – Thursday, October 8

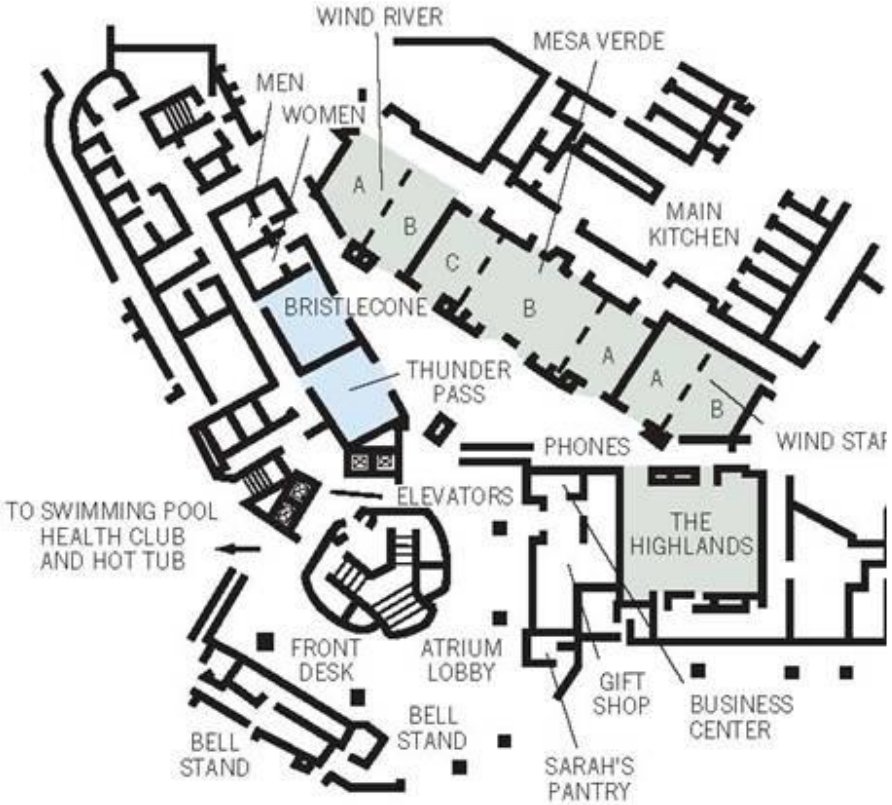
9:00 – 9:15	**Announcements** (Grand Mesa)		
9:15 – 10:30	**Keynote: Larry L. Constantine - Interaction Design and Model-Driven Development** Robert France, Session Chair (Grand Mesa)		
10:30- 11:00	**Coffee Break** (Grand Mesa pre-function area)		
Room:	**Wind River**	**Wind Star**	**Highlands**
11:00 – 12:30	**Language Specification and Annotation** (4a) Jean-Michel Bruel, Session Chair Soltenborn, Engels *Towards Test-Driven Semantics Specification* (Scientific) Leung, Mandl, Latronico, Shelton, Lee *Scalable Semantic Annotation using Lattice-based Ontologies* (Scientific) Walter, Silva Parreiras, Staab *OntoDSL: An Ontology-Based Framework for Domain-Specific Languages* (Scientific)	**Domain-Specific Languages** (4b) Ileana Ober, Session Chair Hermans, Pinzger, Deursen *Domain-Specific Languages in Practice: A User Study on the Success Factors* (Empirical) Dhaussy, Pillain, Creff, Raji, Le Traon, Baudry *Evaluating Context Descriptions and Property Definition Patterns for Software Formal Validation* (Empirical) Wienands, Golm *Anatomy of a Visual Domain-Specific Language Project in an Industrial Context* (Empirical)	**Model-Based Analysis** (4c) Michal Smialek, Session Chair Cheng, Sawyer, Bencomo, Whittle *A Goal-Based Modeling Approach to Develop Requirements of an Adaptive System with Environmental Uncertainty* (Scientific) Yue, Briand, Labiche *A Use Case Modeling Approach to Facilitate the Transition Towards Analysis Models: Concepts and Empirical Evaluation* (Scientific) Maoz *Polymorphic Scenario-Based Specification Models: Semantics and Applications* (Scientific)
12:30 – 2:00	**Lunch** (Grand Mesa A/B/C)		
2:00 – 3:30	**Model (De-) Composition and Abstraction** (5a) Bernhard Rumpe, Session Chair Klein, Kienzle, Morin, Jézéquel *Aspect Model Unweaving* (Scientific) Oldevik, Menarini, Krüger *Model Composition Contracts* (Scientific) Johannes, Zschaler, Fernandez, Castillo, Kolovos, Paige *Abstracting Complex Languages through Transformation and Composition* (Scientific, 15 min presentation) Yie, Casallas, Wagelaar, Deridder *An approach for evolving transformation chains* (Scientific, 15 min presentation)	**Distributed Software Development** (5b) Bernhard Schätz, Session Chair Daw, Vetter *Deterministic UML Models for Interconnected Activities and State Machines* (Scientific) Kraemer, Herrmann *Automated Encapsulation of UML Activities for Incremental Development and Verification* (Scientific) *Drusinsky, Shing* *Using UML Statecharts with Knowledge Logic Guards* (Scientific)	**Service and Business Process Integration** (5c) Gerti Kappel, Session Chair Esfahani, Malek, P. Sousa, Gomaa, A. Menascé *A Modeling Language for Activity-Oriented Composition of Service-Oriented Software Systems* (Scientific) Fleurey, Solberg *A Domain Specific Modeling Language supporting Specification, Simulation and Execution of Dynamic Adaptive Systems* (Scientific) Milanovic, Cartsburg, Shtelma *Executable Domain Specific Language for Message-based System Integration* (Scientific)
3:30- 4:00	**Coffee Break** (Grand Mesa pre-function area)		
4:00 – 5:00	**Panel: Real Programmers Don't Model** Øystein Haugen, Session Chair (Grand Mesa)		

Conference Details – Friday, October 9

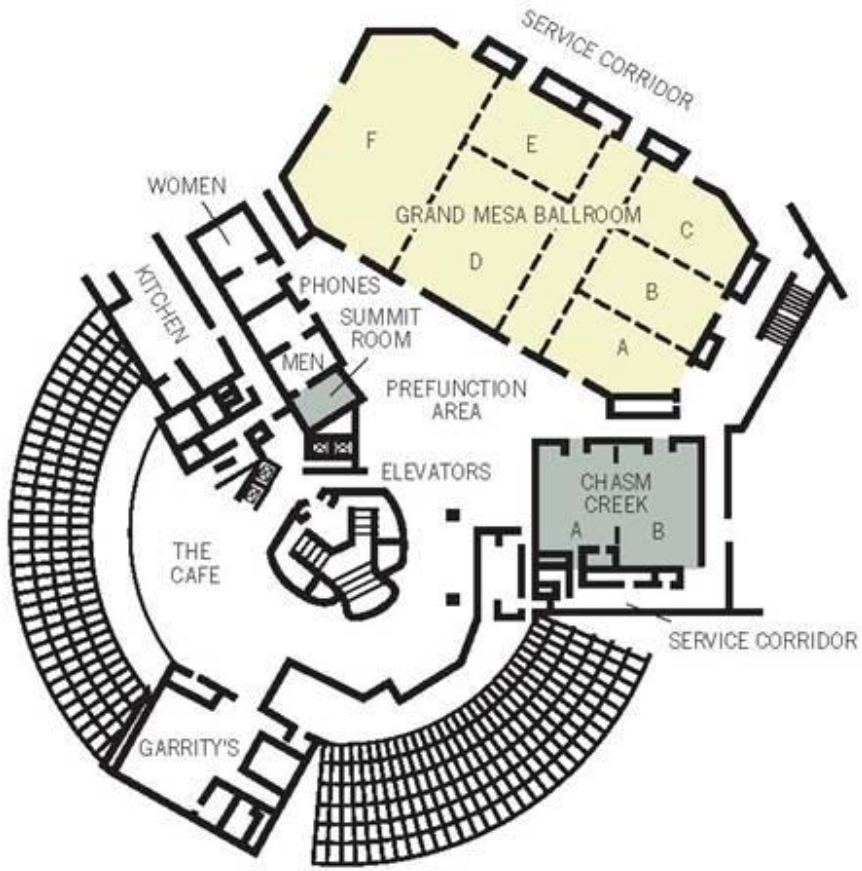
9:00 – 9:15	**MODELS 2010 & Announcements** (Grand Mesa)		
9:15 – 10:30	**Keynote: Grady Booch - Architectural Mining: The Other Side of the MDD** Gregor Engels, Session Chair (Grand Mesa)		
10:30- 11:00	**Coffee Break** (Grand Mesa pre-function area)		
Room:	**Wind River**	**Wind Star**	**Highlands**
11:00 – 12:30	**Genericity and Constraints** (6a) Franck Fleurey, Session Chair Moha, Mahé, Barais, Jézéquel *Generic Model Refactorings* (Scientific) Cuccuru, Radermacher, Gerard, Terrier *Constraining Type Parameters of UML 2 Templates with Substitutable Classifiers* (Scientific, 15 min presentation) Moiseev, Hayashi, Saeki *Generating Assertion Code from OCL: A Transformational Approach Based on Similarities of Implementation Languages* (Scientific) Chimiak-Opoka *OCLLib, OCLUnit, OCLDoc: Pragmatic Extensions for the Object Constraint Language* (Scientific, 15 min presentation)	**Variability Management** (6b) Geri Georg, Session Chair Cengarle, Groenniger, Rumpe *Variability within Modeling Language Definitions* (Scientific) Schwanninger, Groher, Elsner, Lehofer *Variability Modelling Throughout the Product Line Lifecycle* (Empirical, 15 min presentation) Morin, Perrouin, Lahire, Barais, Vanwormhoudt, Jézéquel *Weaving Variability into Domain Metamodels* (Scientific) Narayanan, Levendovszky, Balasubramanian, Karsai *Automatic Domain Model Migration to Manage Metamodel Evolution* (Scientific, 15 min presentation)	**Model Transformation Engineering** (6c) Dániel Varró, Session Chair Sun, White, Gray *Model Transformation by Demonstration* (Scientific) Wimmer, Kusel, Schoenboeck, Kappel, Retschitzegger, Schwinger *Reviving QVT Relations: Model-based Debugging using Colored Petri Nets* (Scientific, 15 min presentation) Kuester, Gschwind, Zimmermann *Incremental Development of Model Transformation Chains using Automated Testing* (Scientific) Giner, Pelechano *Test-driven Development of Model Transformations* (Scientific, 15 min presentation)

Hyatt Regency Hotel Tech Center, Hotel Maps

GROUND FLOOR



SECOND FLOOR



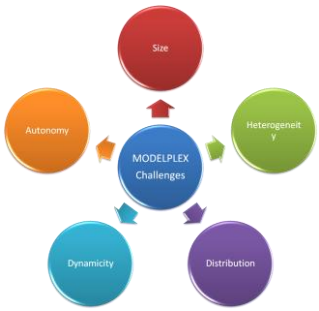
Modelling Solutions for Complex Systems (MODELPLEX)

A full Eclipse-based model-driven engineering solution for complex systems

Sébastien Praud (Thales), Technical Coordinator of the project

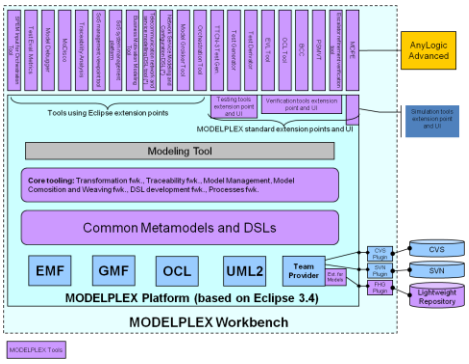
Software engineering is an area of crucial importance to the global economy. With business growing ever-more dependent on advanced technologies, the commercial sector demands a correspondingly wide range of attributes from its software tools. As such the development of new methods of software engineering capable of adapting to emerging demands is a real priority, and the MODELPLEX (Modelling Solutions for Complex Software Systems) project represents an important step towards this goal. The idea of the MODELPLEX project is that it should address issues like the size, complexity and heterogeneity of software by further developing model-driven engineering (MDE) tools and methodologies.

MODELPLEX defines and develops a coherent infrastructure specifically for the application of MDE to the development and subsequent management of **complex systems** within a variety of industrial domains, where "complexity" is characterized by a combination of size, heterogeneity, legacy system management, dynamicity, distribution and autonomy of systems.



A number of different isolated tools supporting MDE already exist but there is no integrated MDE platform for the whole lifecycle of the software development process. In MODELPLEX we are aiming to create just such an open platform so as to solve a number of different problems – such as interoperability, substitutability and traceability.

- A full Eclipse based solution
- A model-based verification and validation technology to address analysis and simulation of complex systems.
- Model repository allowing a fine grained navigation through stored information and providing additional features like versioning, access control and dependency management.
- Extend the system lifecycle target scope from design and building to system management (deployment, operation, and evolution), with model-based techniques.



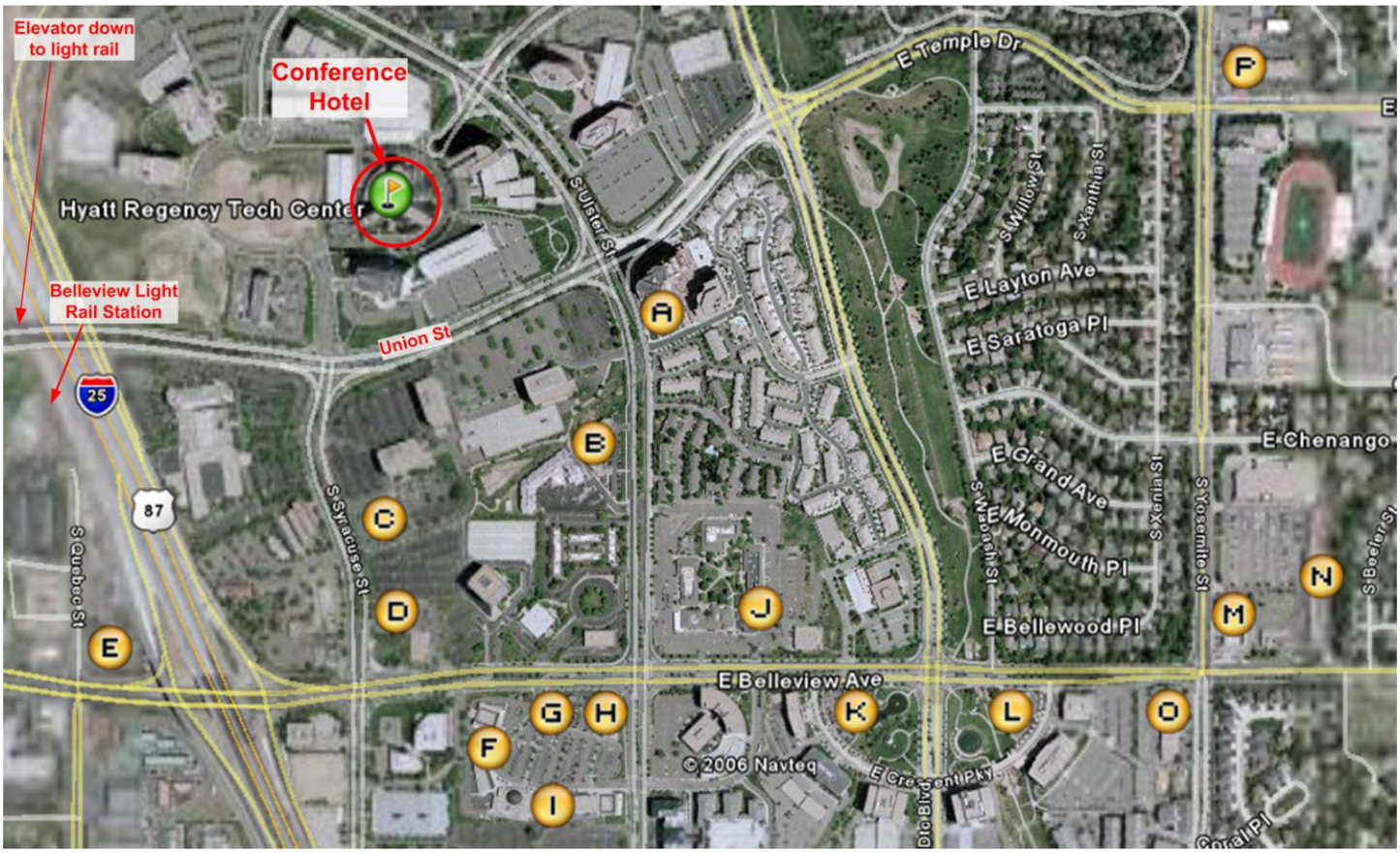
During the MODELS'09 conference, the MODELPLEX team will present a demonstration of the Thales use case showing the multi-viewpoint modelling approach, illustrating the MODELPLEX Integrated Solution based on Eclipse. This demonstration shows a comprehensive MDE approach to tackle the inherent complexity of System-of-Systems (SoS), covering the entire development cycle from business through System and ICT architecture to executable code. They will also demonstrate the Fraunhofer FOKUS model repository, EVL (Epsilon Validation Language) from University of York as well as model weaving (Reuseware) from TU Dresden.

The presenters are as follows:

- Sébastien Praud (Thales), Technical coordinator of the project
- Kumardev Chatterjee (Thales), WP leader responsible for MODELPLEX Integrated Solution releases
- Dimitrios Kolovos (University of York), EVL
- Jendrik Johannes (Technical Unviversity Dresden), Reuseware
- Michael Wagner (Fraunhofer FOKUS), model repository

MODELPLEX is an FP6 project (Sept 2006- Feb 2010)- 20 partners
https://www.modelplex.org/
Email: info@modelplex.org

Area Maps and Attractions: Denver Tech Center Restaurants



I. Bara Sushi & Grill
8000 E. Belleview Ave.
720.489.5509
Sushi/Japanese
Casual

O. Bourbon Street
5117 S. Yosemite St.
303.721.6150
Pizza Bar & Grill
Casual

G. Chipotle
8000 E. Belleview Ave.
303.694.3094
Fast Foot – Mexican
Casual

I. Cool River Café
8000 E. Belleview Ave.
303.771.4117
Steak/Southwest
Business Casual

B. Darcy's
4955 S. Ulster St.
303.770.0477
Irish Bistro & Pub
Casual

N. Einstein Bros. Bagels
4920 S. Yosemite St.
303.721.6655
Bagels
Casual

H. Il Fornaio
8000 E. Belleview Ave.
303.221.8400
Italian
Business Casual

C. Garcia's
5050 S. Syracuse St.
303.779.4177
Mexican
Casual

J. Great Northern Tavern
8101 E. Belleview Ave
303.770.4741
Steak/American
Business Casual

M. Jackson's All American Sports Bar
4948 S. Yosemite St.
303.220.0222
American
Casual

P. Jimmy John's
4682 S. Yosemite St.
303.741.4100
Subs
Casual

A. McCormick & Schmick's
8100 E. Union Ave.
720.200.9339
Seafood
Business Casual

E. McDonald's
5090 S. Quebec St.
303.694.0255
Fast Food – American
Casual

L. Morton's of Chicago
8480 E. Belleview Ave.
303.409.1177
Steak
Business Casual

G. Original Pancake House
8000 E. Belleview Ave.
303.224.0093
Breakfast
Casual

B. Panera Bread
4950 S. Ulster St.
303.741.3770
Deli
Casual

B. Peppino's Pizzeria
4955 S. Ulster St.
720.489.7165
New York Pizza
Casual

I. Purple Martini
8000 E. Belleview Ave.
303.779.0091
Martini Bar/Club
Business Casual

B. Qdoba
4955 S. Ulster St.
303.221.3366
Fast Food - Mexican

P. Renzio's
8933 E. Union Ave.
303.267.0300
Greek
Casual

J. Santoro's Pizza
8101 E. Belleview Ave.
303.770.7428
Pizza
Casual

F. Starbuck's
8000 E. Belleview Ave.
303.221.6236
Coffee
Casual

N. Subway
4930 S. Yosemite St.
303.850.0605
Fast Food – Subs/Sandwiches
Casual

E. Taco Bell
5050 S. Quebec st.
303.796.8538
Fast Food – Mexican
Casual

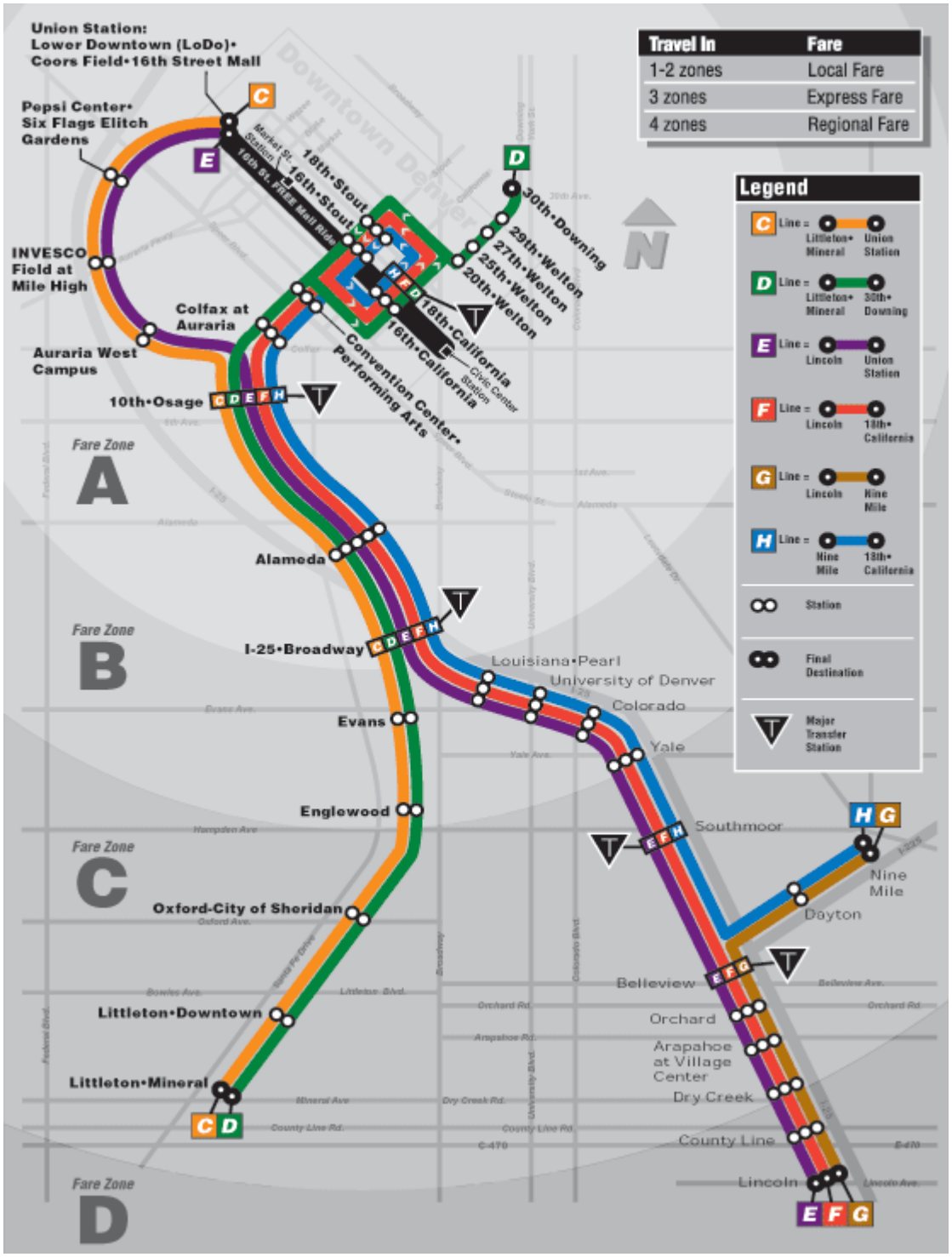
N. Tokyo Joe's
4950 Yosemite St.
303.804.0988
Fast Food – Japanese
Casual

N. Wahoo's Fish Taco
4930 S. Yosemite St.
720.974.7470
Fast Food – Mexican
Casual

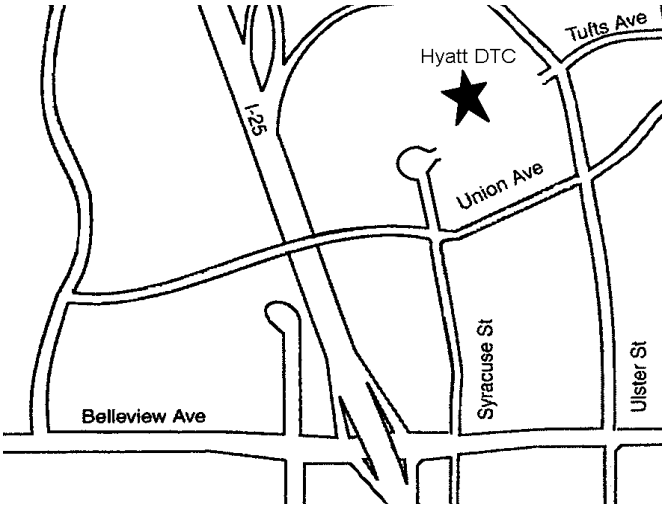
D. Wendy's
5070 S. Syracuse St.
303.850.9752
Fast Food – American
Casual

K. Yia Yia's
8310 E. Belleview Ave.
303.741.1110
European
Business Casual

Area Maps and Attractions: Denver Light Rail Map



Area Maps and Attractions: Directions to Light Rail Station nearest MODELS 2009 Conference Hotel



Directions:

Leaving the Hyatt Regency Hotel property, exit from our back entrance onto S. Syracuse and make a left turn (south). The first traffic light is E. Union, turn right (west). Continue west on the bridge over I-25. On the west side of the bridge there is a white elevator. Take this down to the ground level. From the elevator walk south until you are at the Belleview Light Rail Station. Approximate 10 minute walk.

For your safety, please remember that you are in a large city. We recommend that you follow the suggestions below:

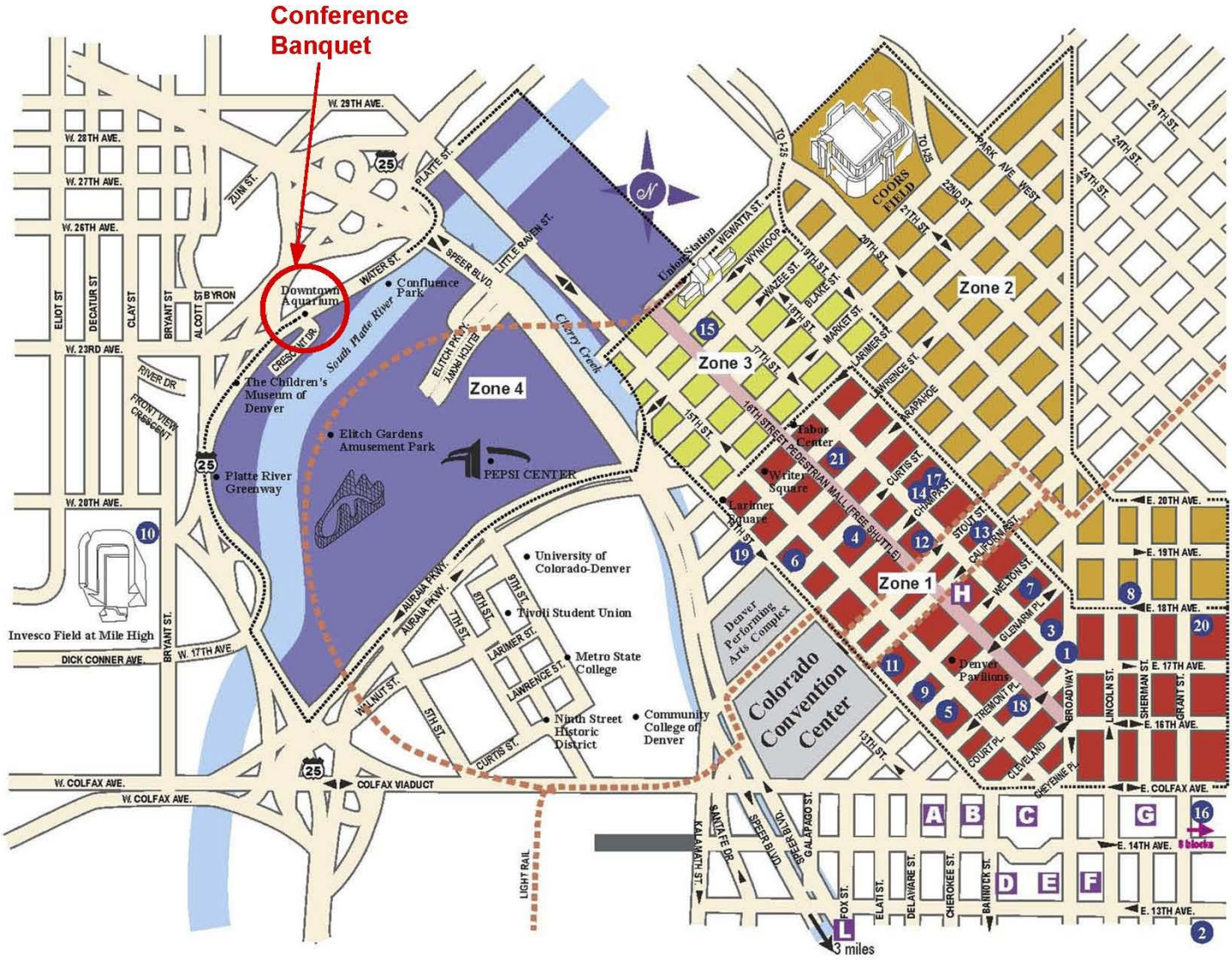
1. It is not recommended to walk alone or at night.
2. Always carry identification with you.
3. Please be careful around intersections and roadways.
4. <u>You are walking at your own risk.</u> Just as you must be careful in a familiar area you should be more careful in an unfamiliar area. Be aware of your surroundings at all times and keep alert. The Hyatt Regency hotel does not accept responsibility for any guest who chooses to walk to any of the surrounding areas.

Area Maps and Attractions: Downtown Denver Restaurants and Entertainment

Denver Dining - walking distance from the CCC

Denver has a very accessible and walkable downtown. The 16th Street Mall is a mile and a half long pedestrian street that runs through the center of the city. The Mall is lined with trees, planters, cafes and restaurants, shops, fountains, plazas and parks. A fleet of over thirty free shuttles carry shoppers, visitors, and the downtown workforce along the length of the Mall, stopping on every corner in each direction. The shuttles operate seven days a week, free of charge. Monday through Saturday, the shuttle operates from 6:00am until 1:00am, and Sunday, from 7:00am until 1:00am. During peak times, the shuttles arrive at a rate of every 30-90 seconds. All shuttles are wheelchair accessible. The free Mall shuttle brings all downtown hotels, businesses, and restaurants within easy walking distance.

1. The Brown Palace Hotel
2. The Burnsley Hotel
3. Comfort Inn Downtown
4. Courtyard by Marriott
5. Crowne Plaza
6. The Curtis Hotel
7. Grand Hyatt Denver
8. Hampton Inn & Suites
9. Hilton Garden Inn
10. Hotel VQ at Mile High
11. Hyatt Regency Denver at CCC
12. Magnolia Hotel
13. Marriott City Center
14. Hotel Monaco
15. The Oxford Hotel
16. Ramada Inn Downtown
17. Residence Inn Denver City Center
18. Sheraton Hotel Denver
19. Teatro Historic Hotel
20. Warwick Hotel-Denver
21. The Westin Hotel Tabor Center



A U.S. Mint
B Denver City & County Building
C Civic Center Park
D Denver Art Museum
E Denver Public Library
F Colorado History Museum
G Colorado State Capitol Building
H VIST DENVER Information Center
L Cherry Creek Shopping

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MODELS 2010 @ OSLO

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MODELS 2010 will be in Oslo, Norway

The conference site, **Oslo Congress Centre**, is in the very heart of Oslo, with hotels in walking distance. The **social program** will include

- **reception** at the **City Hall** at the harbor front,
- visit to the original **Viking Ships**
- **banquet** at **Gamle Logen**, in the old town of Oslo.

The Oslo Airport Gardermoen is a train ride of 20 min from Oslo.

Weather

Month	Avg. High	Avg. Low	Avg. Precip.
September	15.0° C (59.0° F)	7.5° C (45.5° F)	9.0 cm (3.5 in)
October	9.3° C (48.7° F)	3.8° C (38.8° F)	8.4 cm (3.3 in)

Early October in Oslo is a time of cool, crisp weather that is generally sunny and clear. Oslo is located in the center of Scandinavia, and is bounded by the fjord and forested hills, providing stunning scenery. The woods around Oslo are easily accessible by metro, and the city itself offers many outdoor cafes and pedestrian areas near the city center and along the waterfront. Most sites and museums are accessible via short walks or metro rides. See www.visitoslo.com/en/

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