








THURSDAY, OCTOBER 22

 Economics, Finance, & Social Sciences	 Mathematics, Computer Sciences, & Statistics	 Software Technology
 Education	 Science, Biotechnology, & Medicine	 Wolfram Research Presentation
 Engineering & Applied Mathematics		








	Golden Gophers/Spartans	Fighting Illini
*7:00AM	Breakfast Illini Ballroom	
7:30AM		
8:00AM		
8:30AM		 Keynote Roger Germundsson & Tom Wickham-Jones Fighting Illini/Little Chief
9:00AM		
9:30AM	Break: Visit Our Sponsors and the <i>Mathematica</i> Store Alumni Ballroom	
10:00AM	 One Variable Differential Calculus Octavio Arzate	 Hands-on Start with <i>Mathematica</i> Tutorial Kelvin Mischo, Wolfram Education Group
10:30AM	 Construction of Educational Hypermodels John McGee & Catherine Inman	 Numeric Calculus Andrew Moylan
*11:00AM	 A <i>Mathematica</i> Hat Trick: The Teacher's Guide to Effectively Teach with <i>Mathematica</i> Cliff Hastings	 Dynamic Dipole-Dipole Magnetic Interaction and Nonlinear Damped Oscillations Haiduke Sarafian
11:30AM	 The Front End of Tomorrow John Fultz	 Catchment Scale 3D Geological Models from Sparse Datasets Bryce Kelly
12:00PM	Break: Visit Our Sponsors and the <i>Mathematica</i> Store Alumni Ballroom	
*12:30PM	 Development of <i>Mathematica</i> Interactive Manipulations for Estimating Groundwater Recharge and Discharge Rates and Spatial Patterns Yu-Feng Lin	 Toward a grid<i>Mathematica</i> Transformative Tool for Understanding Complexity in Infectious Disease Epidemics Diglio Simoni
1:00PM	 Interactive Tools for Mathematics Instruction Richard Mercer	
1:30PM		 Keynote Stephen Wolfram Fighting Illini/Little Chief
2:00PM		
2:30PM	Break: Visit Our Sponsors and the <i>Mathematica</i> Store Alumni Ballroom	
3:00PM	 Building Interactive Textbooks and Documents with <i>Mathematica</i>** Eric Schulz	 Characterizing the Neural Response to Electric Shocks Using Discrete-Time Delay Maps David O'Gorman
3:30PM		
4:00PM	 From <i>Mathematica</i> to Manuscript: Publishing and Preparation of Scientific Content** Precision Graphics, Inc.	 web<i>Mathematica</i> 3.0 Tom Wickham-Jones & Brenton Bostick
4:30PM	 Calculus with <i>Mathematica</i> Tutorial Harry Calkins, Wolfram Education Group	 Kurzweil Rays Robert de Marrais
5:00PM	Publishing Session Illini Ballroom 5:00PM–7:00PM Closed Session	
7:00PM	Developer Session Closed Session, Moved to the Illinois Room at Homewood	 Term-Rewriting Systems and Descent in Some Categories Dali Zangurashvili
7:30PM		 Geostatistics Diego Oviedo-Salcedo
8:00PM		 Splines in <i>Mathematica</i> Yu-Sung Chang
8:30PM		 Wavelets in <i>Mathematica</i> Vivek Joshi

Little Chief	Boilermakers/Wildcats/Nittany Lions	
		*7:00AM
		7:30AM
		8:00AM
 Keynote Roger Germundsson & Tom Wickham-Jones Fighting Illini/Little Chief		8:30AM
		9:00AM
		9:30AM
 Modeling Long-Term Care Insurance Seth Chandler	 Solutions Sites: Developing <i>Mathematica</i> for Your Field Conrad Wolfram	10:00AM
 Customer Profitability Analysis and Improvement Hans Woudboer	 Face Gear Surface Generation with <i>Mathematica</i> Steve Bush	10:30AM
 Experiences with Mainstream Parallel Computing Roman Maeder	 A Tool for Linear and Nonlinear System Identification Jonas Sjöberg & Håkan Hjalmarsson	*11:00AM
 Parallel Computing in <i>Mathematica</i> 7 Richard Gass	 Finite Element Engineering Applications Based on FEMPlayer and <i>Mathematica</i> Player Pro Jože Korelc & Teja Melink	11:30AM
		12:00PM
 Appcippa Salvatore Mangano	 Manipulate Secrets Revealed Lou D'Andria	*12:30PM
	 Graph Computation Charles Pooh	1:00PM
 Keynote Stephen Wolfram Fighting Illini/Little Chief		1:30PM
		2:00PM
		2:30PM
 Modeling Quasi-Quantum Social Processes David Sallach	 A Tour of the Infrastructure behind Wolfram Alpha Chris Williamson	3:00PM
 Silverlight Animation Using <i>Mathematica</i> Keehong Song	 <i>Mathematica</i> as a Tool for Hobbyists Rob Raguet-Schofield	3:30PM
 Social Complexity and Global Academic Systems: A New Kind of Sociology Probes U.S. Public Higher Education Henry Allen	 Using <i>Mathematica</i> for Simultaneous Instrument Control, Data Archiving, and Analysis William Meyer	4:00PM
 Customized Exporting of Browser-Readable Content from <i>Mathematica</i>** Phil Ramsden	 <i>Mathematica</i> and the 10¹⁰-Row Database Adam Jacobs	4:30PM
		5:00PM
 CUDA and OpenCL Programming from within <i>Mathematica</i> Abdul Dakkak		7:00PM
 Dynamic Timeline Plots Daniel Martinez		7:30PM
 Using Ruby on Rails Models with <i>Mathematica</i> Gustavo Delfino		8:00PM
 Goodwin's Nonlinear Model and Technological Progress (Poster Presentation) Miloslav Vošvrda & Jan Kodera		8:30PM

*Meals in Illini Ballroom Breakfast: 7:00AM–8:30AM, Lunch: 11:00AM–12:00PM and 12:30PM–1:30PM

**Publishing Session

FRIDAY, OCTOBER 23

 Economics, Finance, & Social Sciences	 Mathematics, Computer Sciences, & Statistics	 Software Technology
 Education	 Science, Biotechnology, & Medicine	 Wolfram Research Presentation
 Engineering & Applied Mathematics		








	Golden Gophers/Spartans	Fighting Illini
*7:00AM	Breakfast Illini Ballroom	
7:30AM		
8:00AM		 Keynote Publishing—The Future Conrad Wolfram & Theodore Gray Fighting Illini/Little Chief
8:30AM		
9:00AM	Break: Visit Our Sponsors and the Mathematica Store Alumni Ballroom	
9:30AM	 Making and Giving Presentations with Mathematica Tutorial Paul Wellin, Wolfram Education Group	 Differential Boundary Conditions in Electrodynamics Terje Vold
10:00AM	 NetMath Student Projects Debra Woods	 Probability and Statistics Roger Germundsson
10:30AM	 Mathematica For Brand-Spanking-New Users Ann Kullenberg	
*11:00AM	 Wolfram Alpha: Recalculating Teaching and Learning Maria Andersen	 Information Visualization Brett Champion
11:30AM	 Give Me Tools, Not Tutorials Marcus McGuff	 Mathematical Imagination in Architecture Bruno Autin
12:00PM	Break: Visit Our Sponsors and the Mathematica Store Alumni Ballroom	
*12:30PM	 Visualizing Differential Equations with the VisualDSolve Package Antonin Slavik & Stan Wagon	
1:00PM	 webMathematica and Wolfram Workbench Tutorial Adam Berry, Wolfram Education Group	 Using Mathematica to Model Cardiovascular Function Timothy Shine
1:30PM	 The Technology behind Wolfram Alpha Oyvind Tafjord	 Power Set Unions Karen Collins
2:00PM		 On the Distribution of Roots of Random Polynomials on the Complex Plane Henryk Zawadzki
2:30PM	 Plane Geometry: Object-Oriented Modeling with Objectica Stephan Leibbrandt	 Simulation and Measurement of the Time-Varying Casimir Force John Kohoutek
3:00PM	Break: Visit Our Sponsors and the Mathematica Store Alumni Ballroom	
3:30PM	 Teaching and Learning with Mathematica Abby Brown and Students	 Using the Wolfram Alpha API Todd Gayley
4:00PM		 A Magnus Expansion Package Renan Cabrera & Herschel Rabitz
4:30PM		
5:00PM		
5:30PM	Cocktail Reception 5:30PM–7:00PM	
6:00PM		
6:30PM		
7:00PM	Dinner 7:00PM–9:00PM	










	Little Chief	Boilermakers/Wildcats/Nittany Lions
*7:00AM		
7:30AM		
8:00AM	 Keynote Publishing—The Future Conrad Wolfram & Theodore Gray Fighting Illini/Little Chief	
8:30AM		
9:00AM		
9:30AM	 Evolving Boolean Functions Bernard Gress	 High-Dimensional Cellular Automata for Neural Network Representation Zdenek Buk
10:00AM	 Parallel Computing with Mathematica Tutorial Eric Wort, Wolfram Education Group	 DataModeler—A New Kind of Modeling Mark Kotanchek
10:30AM	 Using Mathematica in the Modeling of Insurance Claims Mark Coleman & Darrel Barbato	 Data Collections with Mathematica Tutorial Paul Wellin, Wolfram Education Group
*11:00AM	 C# Development Using Mathematica Frank Kampas	 Modeling and Analysis of 3D Mechanical Systems with MathModelica and Mathematica Jan Brugård
11:30AM	 Power Programming with CalcLink and GoogleDocsLink Andreas Lauschke	 An Overview of NDSolve Mark Sofroniou
12:00PM		
*12:30PM	 3D Primitives and Visualization Yuzhu Lu	 Introducing the Drawing Object Nicolas Venuti
1:00PM	 Automated Day Trading Michael Kelly	 Parallel Simulation with MathModelica Peter Aronsson
1:30PM	 Using Mathematica to Close the Technical Development Loop Eric Parker	 When Four Creases Meet: Technical Tessellations Yves Klett & Klaus Drechsler
2:00PM	 Delegating Computations to C Code Yves Papegay	 Safety of New Flight Operational Concepts Mike Ulrey
2:30PM	 Webcomputing at the University of West Bohemia Petr Girg	 Transforming Knowledge Discovery Through Wolfram Alpha Schoeller Porter
3:00PM		
3:30PM	 Improving Function Definitions with Patterns Thomas Meyer	 Tensor Manipulate Jose Martin-Garcia
4:00PM		
4:30PM		
5:00PM		
5:30PM		
6:00PM		
6:30PM		
7:00PM		
















*Meals in Illini Ballroom Breakfast: 7:00AM–8:00AM, Lunch: 11:00AM–12:00PM and 12:30PM–1:30PM

Wolfram Education Group Training 8:00AM–5:00PM, Illinois Room at Homewood

SATURDAY, OCTOBER 24

 Economics, Finance, & Social Sciences	 Mathematics, Computer Sciences, & Statistics	 Software Technology
 Education	 Science, Biotechnology, & Medicine	 Wolfram Research Presentation
 Engineering & Applied Mathematics		

	Golden Gophers/Spartans	Fighting Illini
*7:00AM	Breakfast Illini Ballroom	
7:30AM		
8:00AM		 Keynote How I Wrinkled Norman Foster's Gherkin and Other Adventures in Architecture Chris Carlson
8:30AM		
9:00AM	 Education Workshop This is a half-day workshop providing secondary and community college teachers (or education students) a look at how to integrate <i>Mathematica</i> into their courses. Participants will receive hands-on training in <i>Mathematica</i> and leave with not only an understanding of how to teach with the software, but eligible teachers will receive a <i>Mathematica</i> license to use within their classroom as well.	 Using <i>Mathematica</i> to Explore the Role of Vegetation-Fire Feedbacks in Structuring Ecological Communities Brian Beckage & Chris Ellingwood
9:30AM		 Multidimensional Convex Polyhedra and Searching for Magic Squares Christopher Henrich
10:00AM		 <i>Mathematica</i> Modeling and Simulation Support for Clinical Trials Robert Nachbar
10:30AM		 Asymptotic Expansions for Moments of Functions of Random Sequences Jan Hurt
11:00AM		Break: Visit Our Sponsors and the <i>Mathematica</i> Store Alumni Ballroom
11:30AM		 Interval Arithmetic and Solvability of Boundary Value Problems Jiri Benedikt
12:00PM		 Causality Analysis of Molecular Dynamics Events with <i>Mathematica</i> 7 Bogdan Lesyng & Piotr Majka
12:30PM		 Uses of <i>Mathematica</i> in the Study of a Mathematical Model for Influenza Medication Strategies Zhilan Feng
1:00PM		
1:30PM		
2:00PM		

	Little Chief	Boilermakers/Wildcats/Nittany Lions	
*7:00AM			*7:00AM
7:30AM			7:30AM
8:00AM	 Keynote How I Wrinkled Norman Foster's Gherkin and Other Adventures in Architecture Chris Carlson		8:00AM
8:30AM			8:30AM
9:00AM	 Transforming Knowledge Discovery Through Wolfram Alpha Schoeller Porter	 Symbolic Computations in Finite Element Formulation Gautam Dasgupta	9:00AM
9:30AM	 ListDensityPlot 3D, a GPU-based CUDA™ Implementation Markus van Almsick	 Model-Checking Cellular Automata Klaus Sutner	9:30AM
10:00AM	 Tools and Applications for Data Manipulation and Analysis Ariel Sepúlveda	 Workbench 2.0 Tom Wickham-Jones & Adam Berry	10:00AM
10:30AM	 ShareYourNoggin: Platform <i>Mathematica</i> André Mitra	 Applications of Numerical Computation Oliver Ruebenkoenig	10:30AM
11:00AM			11:00AM
11:30AM	 Grid Computing and Optical Design Donald Barnhart & Ann Williamson	 New Solve Adam Strzebonski	11:30AM
12:00PM	 DebugTrace—An Alternative Debugger David Bailey	 Neural Networks and <i>Mathematica</i> Tutorial Jonas Sjöberg & Wolfram Education Group	12:00PM
12:30PM	 A Comprehensive Data and Analysis Platform for a Global Hedge Fund Philip Zecher	 Image Processing with <i>Mathematica</i> Matthias Odisio	12:30PM
1:00PM			1:00PM
1:30PM			1:30PM
2:00PM			2:00PM

*Meals in Illini Ballroom Breakfast: 7:00AM–8:00AM

Wolfram Education Group Training 8:00AM–5:00PM, Illinois Room at Homewood