

# Multi-Level Modeling with Melanie

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Where: Jakob-Haringer-Str. 2, Room T04

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Multi-level modeling based on deep instantiation has attracted growing interest over the last few years as a potentially better way of creating and organizing models, but the "jury is still out" on whether it delivers the benefits that its proponents claim. One of the main reasons why the debate has taken so long to resolve is that there has never been a mature tool for graphical, multi-level modeling that could be compared to traditional OMG and EMF based modeling tools.

This talk introduces a new tool, Melanie, that aims to rectify this situation. Melanie is an EMF-based tool for multi-level that provides a fully featured graphical editor along with a rich set of model checking and reasoning services. In this talk, Colin Atkinson will first introduce the Pan-level Model (abstract syntax) and Level-agnostic Modeling Language (concrete syntax) that underpin Melanie and then demonstrate how a number of classic modeling problems and examples can be modeled using the tool. By the end of the presentation, attendees will have a much clearer picture of the pros and cons of multi-level modeling and the benefits the Melanie tool has to offer.

*Since April 2003, **Colin Atkinson** has been the leader of the Software Engineering Group at the University of Mannheim. Before that he held a joint position as a professor at the University of Kaiserslautern and project leader at the affiliated Fraunhofer Institute for Experimental Software Engineering. From 1991 until 1997 he was an Assistant Professor of Software Engineering at the University of Houston – Clear Lake. His research interests are focused on the use of model-driven and component based approaches in the development of dependable computing systems. He received a Ph.D. and M.Sc. in computer science from Imperial College, London, in 1990 and 1985 respectively, and received his B.Sc. in Mathematical Physics from the University of Nottingham 1983.*



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