INFORMATIK-KOLLOQUIUM

AB Programmiersprachen und Übersetzer Institut für Computersprachen



Einladung

zum Informatik-Kolloquium des AB Programmiersprachen und Übersetzer am

Montag, den 14. Dezember 2009, um 16:30 Uhr

im Hörsaal EI9 Hlawka, Elektrotechnik, Gußhausstraße 25-29 (Neubau), Erdgeschoss

Es spricht

Dr. Baltasar Trancón y Widemann

Universität Bayreuth, Deutschland

über

Programming as a Model for the Theory of Ecosystems

In the course of their evolution, environmental sciences have adopted the research programme of classical physics with the paradigm of mechanistic dynamic systems mostly without critical questioning. It becomes evident that the more the behavior of a system is dominated by its living constituents, the more problematic this approach becomes. On the other hand, there are numerous established, effective traditions of use and management of ecosystems that have great relevance for society, but function without theory on a purely heuristic basis. The result is a rift between theory and practice that is rather unique among the natural sciences. Symptoms of a scientific crisis become apparent and may well herald an impending paradigm shift.

The present talk makes three statements: Firstly, that a computer science expert is able to perceive recent developments in the area of computational ecosystem modelling as symptoms of a crisis of which the user community is not aware. Secondly, that concepts from the areas of software engineering and programming analysis are useful metaphors for instigating a discussion about the role of theory and modelling in ecosystem science. Thirdly, that particular formalisms from the area of program semantics and calculi are well-suited to serve as the foundation of an alternative theory of ecosystems.

Biography: Baltasar Trancón y Widemann has graduated (2000) and received a PhD degree (2007) from TU Berlin, D. He has worked as a teaching assistant at the computer science department of TU Berlin and as a postdoc research fellow at the Software Quality Research Laboratory, University of Limerick, IE. He is currently an assistant professor (Akademischer Rat) at the chair of ecological modelling, University of Bayreuth, D. His research interests include functional and generative programming techniques, domain-specific formalisms and tools, metainformation and markup, foundational theory of semantics and of science.

(http://www.bayceer.uni-bayreuth.de/mod/)

Zu diesem Vortrag lädt der Arbeitsbereich für Programmiersprachen und Übersetzer am Institut für Computersprachen herzlich ein.

Tee: 16:00 Uhr in der Bibliothek E185.1, Argentinierstr. 8, 4. Stock (Mitte).