Einladung

zum Informatik-Kolloquium des

AB Programmiersprachen und Übersetzer am

Mittwoch, den 1. April 2009, um 17:00 Uhr s.t.

in der Bibliothek E185.1, Argentinierstr. 8, 4. Stock (Mitte)

Es spricht

Prof. Dr. Robert Glück

University of Copenhagen, Denmark

über

Is There a Fourth Futamura Projection?

Abstract: The three classic Futamura projections stand as a cornerstone in the development of partial evaluation. The observation by Futamura [1983], that compiler generators produced by his third projection are self-generating, and the insight by Klimov and Romanenko [1987], that Futamuras abstraction scheme can be continued beyond the three projections, are systematically investigated, and several new applications for compiler generators are proposed. Possible applications include the generation of quasi-online compiler generators and of compiler generators for domain-specific languages, and the bootstrapping of compiler generators from program specializers. From a theoretical viewpoint, there is equality between the class of self-generating compiler generators and the class of compiler generators produced by the third Futamura projection. This exposition may lead to new practical applications of compiler generators based on partial-evaluation methods, as well as deepen our theoretical understanding of program specialization.

Biography: Robert Glück is an Associate Professor of Computer Science at the University of Copenhagen, Denmark. He received his Habilitation and doctor degree from the Vienna University of Technology, Austria, where he also worked as Universitätsassistent. He was research assistant at the City University of New York, USA, and received the Erwin-Schrödinger-Fellowship of the Austrian Science Foundation (FWF). For four years he worked at Waseda University, Tokyo, as a researcher and project leader for the Japan Science and Technology Agency (JST) and the Japan Society for the Promotion of Science (JSPS). His main research interests include advanced programming languages, automatic program transformation, and metaprogramming techniques. Robert Glück is currently a visiting professor at TU Vienna, where he delivers a lecture course on "Programminvertierung und Reversibles Rechnen" as part of an ERASMUS/SOKRATES Exchange Agreement between TU Vienna and The University of Copenhagen. (`http://www.diku.dk/~glueck/`)

Zu diesem Vortrag lädt der *Arbeitsbereich für Programmiersprachen und Übersetzer am Institut für Computersprachen* herzlich ein.
Tee: 16:30 Uhr in der Bibliothek E185.1, Argentinierstr. 8, 4. Stock (Mitte).