

calculus and C' is related to C as Gödel-Bernays set theory is related to ZF, if C is consistent, then so is C' , and Mostowski proved that any theorem of C' which can be formalized in C is a theorem of C . In 1954, Shoenfield gave a direct method for proving a contradiction in C from a contradiction in C' . He is also the author of the well-known textbook *Mathematical Logic*, first published by Addison-Wesley in 1967.

Turing Award to Robin Milner. The 1991 Turing Award of the Association for Computing Machinery (ACM) went to computer scientist Robin Milner of the University of Edinburgh in Scotland. Among the reasons for giving the award to Professor Milner, the ACM cited his work in LCF, the mechanization of Dana Scott's logic of computable functions, which is regarded as the first theoretically based practical tool for constructing machine-assisted proofs. Professor Milner, who developed LCF in 1971, was born in Plymouth, England in 1934 and received his B.A. in mathematics from King's College, Cambridge University, in 1957.

Meetings

CALL FOR PARTICIPATION

(Workshop at GWAI'92)
BONN, 1-2 September 1992

LOGIC & CHANGE

Logical approaches to Artificial Intelligence have the advantage of offering a declarative framework for the representation of knowledge. On the other hand, Classical Logic, which has been the generally assumed logical theory in AI during the past decades, was originally conceived for the static world of mathematics; therefore, it is not equipped to deal with the notions of ACTION and CHANGE, which are often crucial in the

problems that AI is meant to address. Many of the criticisms against the "logician" view of AI find one of their main motivations in the fact that Classical Logic even rules out the possibility of a dynamically changing world.

However, recently the AI community has started to consider alternative logical theories, which are better equipped to cope with the problems mentioned above. Among such theories there are Modal Logic, Temporal Logic, Dynamic Logic, Girard's Linear Logic, Bibel's Linear Proofs, and Gabbay's Labeled Deductive Systems.

The workshop will focus on the topics of action and change and the way logic attempts to deal with them. Special consideration will be given to logics or logical formalisms which not only are able to make statements about actions and changes, but additionally offer a more explicit representation of actions and changes.

Concerned fields of application are, among others: Planning, Reactive Concurrent Systems, Multiagent Worlds, Non-Monotonic Reasoning, Inheritance with Exceptions, Change and Logic Programming.

A workshop on this topic has already been organised at last year's GWAI with a large number of international contributions. This year's workshop will include the following invited lectures:

Christoph Brzoska (University of Karlsruhe):

"Temporal Logic Programming based on the CLP paradigm"

Dov Gabbay (Imperial College):

"Temporal Visas – Skolemizing across Time"

Stephen Hoelldobler (TH Darmstadt):

"Equational Logic Programming, Action, and Change"

Alberto Martelli (University of Turin):

"Truth Maintenance Systems and Belief Revision"

Camilla Schwind (University of Marseille):
"Reasoning about Change and Evolution"

If you are interested to contribute this year, please submit an extended abstract (2-3 pages) or a full paper.

Submissions must be sent to:

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The submitted abstracts/papers will be refereed by the organizers.

Deadlines: June 30, 1992: Deadline for submissions; July 15: 1992
Notification of acceptance

Organizers: Bertram Fronhoefer, Technical University Munich; Alexander Herold, ECRC Munich; Remo Pareschi, ECRC Munich

The GWAI is the National German Conference on Artificial Intelligence. All Workshop participants also have to register for the GWAI conference and have to pay the GWAI conference fees.

FIRST CALL FOR PAPERS

"LOGIC AT WORK"

APPLIED LOGIC CONFERENCE

December 17-19, 1992, University of Amsterdam

Twenty years ago, logic was mainly applied to mathematical and philosophical problems. Nowadays the term *applied logic* has a far wider meaning, as numerous applications of logical methods in computer science, formal linguistics and other fields testify.