Preface

This volume contains a selection of the papers presented at the 3rd Workshop on Pragmatics of Decision Procedures in Automated Reasoning (PDPAR’05), held in Edinburgh, Scotland, on July 12, 2005, as part of the 17th International Conference on Computer Aided Verification (CAV’05).

The applicative importance of decision procedures for the validity or the satisfiability problem in decidable first-order theories is being increasingly acknowledged in the verification community: many interesting and powerful decision procedures have been developed, and applied to the verification of word-level circuits, hybrid systems, pipelined microprocessors, and software. The PDPAR’05 workshop has brought together designers, developers, and users of decision procedures to discuss the issues related to the design, implementation, and assessment of decision procedures.

The two previous editions have been affiliated to CADE and IJCAR. This year, PDPAR’05 has been a satellite event of CAV’05, to emphasize the increasing role of decision procedures in computer-aided verification. The workshop also served as a forum for the development of the “Satisfiability Modulo Theories Library” (SMT-LIB) initiative, that aims at establishing a standardized library of relevant benchmarks for decision procedures.

The workshop program included

• two keynote presentations, by Natarajan Shankar (SRI) and Eli Singerman (Intel);
• a special session dedicated to SMT-COMP, the first “Satisfiability Modulo Theories” Competition; and
• 9 technical paper presentations.

We would like to thank all the people who contributed to the organization of the PDPAR’05 Workshop. In particular we are deeply grateful to:

• the other members of the Program Committee: Thomas Ball, Clark Bar-
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• the organizers of CAV’05, who made all this possible.

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Alessandro Armando
Dipartimento di Informatica, Sistemistica e Telematica (DIST)
University of Genova, Italy

Alessandro Cimatti
Istituto per la Ricerca Scientifica e Tecnologica (ITC-IRST)
Trento, Italy

Program Chairs of the PDPAR’05 Workshop