Foreword

On behalf of the organising committee we welcome you to the 1999 International Symposium on Physical Design (ISPD). Once again the symposium is being held in Monterey, California, in the Embassy Suites Hotel.

The International Symposium on Physical Design provides a forum for the exchange of ideas and results in the area of physical design of VLSI systems. This meeting evolved from the ACM/SIGDA Physical Design Workshops held during the years 1987-1996. Interestingly, interest in this area, and hence attendance in this meeting, started out high in the late 1980’s, dropped off in the early nineties, and has grown back dramatically in recent years. The number of researchers working in this area, and the set of new commercial interests, has clearly proven that physical design is not a dead issue: it is stronger than ever.

This year's Symposium focuses on CAD algorithms and practices generating and analysing deep-submicron designs. An outstanding set of technical papers has been selected for oral and poster presentation. All of these papers, whether oral or poster, appear here in the proceedings. These papers are complemented by invited speakers that express the views of two very different, but critical forces in this area. Our keynote speaker, Chris Malachowski will outline the needs of high-end non-microprocessor chip designers. Our banquet speaker, Andy Bechtolsheim will discuss the financial and technical issues involved in this business. By user request we have three tutorials on key technologies and a panel ranking the critical problems in CAD. These are intended not only to be interesting in their own right for this year’s audience, but to help educate and outline the key problems in physical design, so that researchers attending the conference will be guided in their work. Perhaps we will see some of these areas addressed at next year’s conference. Finally we have a panel for academics and industrial representatives to speak to the interaction of synthesis and placement.

The symposium has been sponsored by the ACM Special Interest Group on Design Automation. Generous support has also been provided by (in alphabetic order): Avant! Corporation, Intel Corporation, Magma Design Automation, Monterey Design, and Synopsys Inc.

On behalf of the Organising and Technical Program Committees, we sincerely hope that you will find ISPD-99 useful, enjoyable, and informative.

Dwight Hill
Technical Program Chair

Martin Wong
General Chair