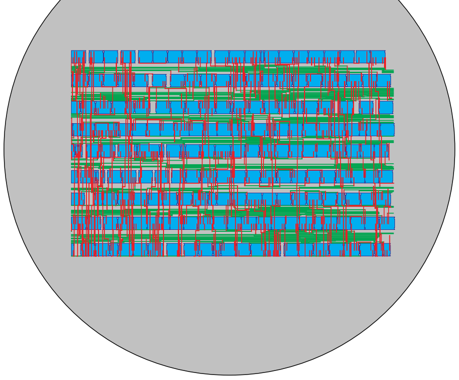
Workshop notes

SLIP'99



First International Workshop on System-Level Interconnect Prediction

Embassy Suites Hotel, Monterey, California
April 10 – 11, 1999

Organizers

Dirk Stroobandt, University of Ghent, Belgium
Andrew B. Kahng, University of California, Los Angeles, USA

Message from the organizers

We cordially welcome all of you to the first International Workshop on System-Level Interconnect Prediction, SLIP-99!

With scaling of feature sizes in VLSI designs, the time delays of electrical signals traveling in interconnect are approaching and even surpassing the delays through devices. Estimation of interconnect parameters (e.g., interconnection length) early in the design cycle therefore gains importance as an aid for planning, placement and routing tools. While most research on interconnect parameter estimations has been performed in the *a posteriori* (i.e., post-layout) regime, this Workshop focuses on *a priori* and *on-line* (i.e., pre-layout and during-layout) estimations. The Workshop is dedicated to all aspects of interconnect design parameter estimations and their applications to CAD and computer architecture evaluation. Special interest goes to Rent's rule.

Despite the rapidly growing importance and awareness of system-level interconnect prediction, the number of researchers – particularly in the domain of *a priori* estimations – is fairly small. We may not always be able to meet each other at VLSI and CAD conferences; our research may not always be in the mainstream scope of conference technical programs; and tracks or sessions devoted to interconnect prediction are rare. To bring researchers in this field together in a context that is truly their own, SLIP-99 was born. The fact that almost all major researchers in the field are attending this Workshop strengthens our belief that it fills a gap. Also, with attendees from the United States, Europe, as well as Asia, the Workshop surely has an international character.

The 1999 SLIP Workshop provides an informal context for discussions of key new directions in the field. The program starts with a tutorial on Rent's rule and its applications in *a priori* wirelength estimations. We are proud to also present two invited speakers who are really driving forces in the field, Wilm E. Donath and James D. Meindl. Furthermore, 8 technical papers will be presented in two sessions. But potentially the most excitement and interest may be generated during the roundtable discussions where all participants will have the opportunity to discuss, in an informal setting, position statements on the problems we are facing – and will be facing – in our research domain. We hope that these brainstorming roundtables will result in a wealth of new ideas to initiate new research projects.

This year, SLIP-99 is colocated with ISPD-99, the International Symposium on Physical Design. Attendees of both meetings can broaden their scope of interests and keep track of the changing contexts for both fields. Contributions to SLIP-99 are welcomed as submissions to a Special Issue of the IEEE Transactions on VLSI Systems, devoted to System-Level Interconnect Prediction. We encourage all SLIP-99 attendees to submit high-quality papers to this Special Issue.

We are already excited about this Workshop. We hope that you will find it truly exciting, useful, and enjoyable. Again, a warm welcome to SLIP'99!

Sincerely,

Dirk Stroobandt and Andrew B. Kahng, Organizers

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List of preregistered participants

Prof. Pavel L. Barseghyan (Armenia, now R&D Manager in Richardson, Texas, USA)
Mr. Andrew E. Caldwell (University of California, Los Angeles, CA, USA)
Dr. Tom Chen (HP, Fort Collins, CO, USA)
Prof. Jun-Dong Cho (Sungkyunkwan University, Suwon, Korea)
Mr. Philip Chong (University of California, Berkeley, CA, USA)
Prof. Phillip Christie (University of Delaware, Newark, DE, USA)
Dr. Wilm E. Donath (IBM T.J. Watson Research Laboratory, NY, USA)
Mr. Thomas Grund (Chemnitz University of Technology, Chemnitz, Germany)
Prof. Andrew B. Kahng (University of California, Los Angeles, CA. USA)
Dr. Sandeep Koranne (Indian Institute of Technology, Delhi, India)
Prof. Ernest S. Kuh (University of California, Berkeley, CA, USA)
Mr. Igor L. Markov (University of California, Los Angeles, CA, USA)
Prof. James D. Meindl (Georgia Institute of Technology, Atlanta, GA, USA)
Mr. David Z. Pan (University of California, Los Angeles, CA, USA)
Mr. Arifur Rahman (Massachusetts Institute of Technology, Cambridge, MA, USA)
Mr. Abhishek Ranjan (Northwestern University, Evanston, IL, USA)
Prof. Majid Sarrafzadeh (Northwestern University, Evanston, IL, USA)
Prof. Xiaoyu Song (Portland State University, OR, USA)
Dr. Dirk Stroobandt (University of Ghent, Gent, Belgium)
Mr. Dennis Sylvester (University of California, Berkeley, CA, USA)
Mr. Peter Verplaetse (University of Ghent, Belgium)
Mr. Maogang Wang (Northwestern University, Evanston, IL, USA)
Dr. Alexander Zelikovsky (Georgia State University, Atlanta, GA, USA)
Prof. Gerhard Zimmermann (University of Kaiserslautern, Kaiserslautern, Germany)