Foreword

Dear colleague,

We proudly present to you the Advance Programme of **DATE 14**. DATE combines the world's favorite electronic systems design and test conference with an international exhibition for electronic design, automation and test, from system-level hardware and software implementation right down to integrated circuit design.

DATE 14 received 1090 paper submissions; an all-time high for DATE and an 8% increase over DATE 13. 890 of those submissions were eligible for review. DATE is truly an international conference. Besides the large share (46%) of submissions coming from Europe, 23% of submissions are from North- America, 27% from Asia, and 4% from the rest of the world. This clearly demonstrates DATE's global reach and impact.
The most attractive topics this year were: "Architectural and Microarchitectural Design" in the Design Methods and Tools Track, "Secure Systems" in the Application Design Track, "On-Line Test, Fault Tolerance and Reliable System Design" in the Test and Reliability Track and "Real-time, Networked, and Dependable Systems" in the Embedded Systems Software Track.

For the 17th successive year DATE has prepared an exciting technical program, with the help of more than 300 members of the Technical Program Committee who dedicated their time to perform 3620 reviews (more than four per submission), and select 206 (=23.1%) papers for regular presentation and 107 (= 12.0%) for interactive presentation.

This year the conference will be held in Germany, at the international Congress Center (ICC) in Dresden and will span an entire working week starting on Monday March 24 with tutorials, and ending on Friday March 28 with workshops.

The **plenary keynote speakers** on Tuesday are David Fuller, Vice President of Application and Embedded Software for National Instruments, to talk about "System Design Challenges for Next Generation Wireless and Embedded Systems" and Gerd Teepe, Director Design Engineering at GLOBALFOUNDRIES in Dresden, to talk about "The Growing Importance of Microelectronics from a Foundry Perspective". On the same day, the **Executive Track** offers a series of business panels discussing hot topics. Executive speakers from Synopsys, Cadence, IBM, IMEC, TSMC Europe, Mentor Graphics and many other companies leading the design and automation industry will address some of the complexity issues in electronics design and discuss about the advanced technology challenges and opportunities. To emphasize that DATE is the major event for designers, DATE 14 features invited sessions where **Europe's famous consumer industry presents its best designs and design practices**.

The main conference program from Tuesday to Thursday includes 77 technical sessions organized in parallel tracks from four areas:

D – Design Methods and Tools
A – Application Design
T – Test and Reliability
E – Embedded Systems Software

Extra tracks are dedicated to the Executive Day on Tuesday and the two special days: **"System Level Design"** Day on Wednesday and **"Advancing Electronics Beyond CMOS"** Day on Thursday.

There is a lunch-time keynote on Wednesday by Michael Bolle (Bosch, DE), who will talk on "The connected car and its implication to the automotive chip roadmap". A second lunch-time keynote on Thursday by Karl Leo (Fraunhofer Institute, DE) will be on "Organic Electronics – From Lab to Markets". Additionally, there are 107 Interactive Presentations which are organized into five IP sessions.

Finally, DATE offers a comprehensive overview of commercial design and verification tools in its exhibition including vendor seminars and abundant networking possibilities with fringe meetings.

We wish you a productive and exciting DATE 14 and a memorable social party on Wednesday evening.

DATE 14 General Chair
Gerhard Fettweis
TU Dresden, DE

DATE 14 Programme Chair
Luca Fanucci
University of Pisa, IT