



Call for participation
4th Workshop on Mapping of Applications to MPSoCs
Schloss Rheinfels, St. Goar, Germany
June 28-29th, 2011



- **Aims and scope:** Recent technological trends have led to the introduction of multi-processor systems on a chip (MPSoCs). It can be expected that the number of processors on such chips will continue to increase. Power efficiency is frequently the driving force having a strong impact on the architectures being used. As a result, heterogeneous architectures incorporating functional units optimized for specific functions are commonly employed. This technological trend has dramatic consequences on the design technology. Techniques are required, which map sets of applications onto architectures of MPSoCs. Unfortunately, not much is known about applicable mapping techniques. Mapping could start from task graphs, sequential code or models using other models of computation. Mapping from sequential code requires automatic parallelization techniques. Parallelization techniques designed for high-performance computing are not always applicable, due to the heterogeneity and since memory access times and communication times are substantially different for MPSoCs.

The aim of the workshop is to be a focus point for research on mapping applications to MPSoCs. Directions for future research should be proposed and evaluated. The scope also includes timing analysis for MPSoCs. The goal is to provide - in a few years - the techniques required for mapping applications efficiently. The development of new products will be seriously constrained if this goal cannot be reached.

- **Workshop structure:** Short presentations followed by intensive discussions. No proceedings. Slides can be made available at the ArtistDesign web site. Information about the first three workshops is available via the following URLs: <http://www.artist-embedded.org/artist/map2mpsoc-2008.html>, <http://www.artist-embedded.org/artist/map2mpsoc-2009.html> and <http://www.artist-embedded.org/artist/map2mpsoc-2010.html>
- **Timing:** The timing of the workshop is such that attendees can travel to the venue of the workshop during the morning of Tuesday, June 28th (or one day earlier, if you attend SCOPES as well) and can return home on the afternoon of June 29th. The workshop will start on June 28th with a common meal at lunch time and will finish in the early afternoon of June 29th.
- **SCOPES 2011: The workshop will be held back to back with the SCOPES 2011 workshop** (see <http://www.scopesconf.org>) at the same place. The SCOPES workshop will last from Monday, June 28th, noon, to June 29th, noon. This scheme allows you to attend two workshops at this beautiful place. All the information about SCOPES is available on the SCOPES web site.
- **Informal evening:** In order to stimulate discussions, there will be a social event.
- **Location:** The workshop will take place in the beautiful "Schloss Rheinfels" hotel at St. Goar, Germany. Schloss Rheinfels is a castle at one of the nicest places within the Rhine valley, itself a world heritage site. Among a set of hotels focusing on wellness, the hotel was voted the #1 hotel within Germany in 2007. There is a beautiful view from the hotel onto the river Rhine. See <http://www.schloss-rheinfels.de> for more information about the hotel (unfortunately, only in German). You might want to arrive before the workshop to enjoy a castle tour, romantic dinner in the castle, or wine tasting in the surrounding villages.
- **Travel:**
 - **By plane:** St. Goar is located between the airports of Frankfurt, Frankfurt-Hahn, Köln-Bonn (Cologne), and (somewhat further away) Düsseldorf. Frankfurt-Hahn (served, for example, by Ryanair) is the closest airport (just 46 km away), but there is hardly any public transportation. From the airports, you can reach St. Goar by train or by car as indicated below.
 - **By train:** from Frankfurt: You'll have to change once at Mainz or Bingen. Travel time is between 1:04 and 1:36 hrs. From Cologne airport, you will usually have to go to the city of Cologne first, take a train to Koblenz and then to St. Goar. Travel time is between 1:50 and 2:30 hrs. Check <http://www.bahn.de/> for details.
 - **By car:** By car from Frankfurt: head for Mainz, take A 60 in the direction of Bingen and the continue on the A 61 until exit Pfalzfeld. From the Pfalzfeld exit, drive into the direction of St. Goar. You'll see the castle just before you come to the city of St. Goar. The expected travel time from the airport is about 90 mins. From Frankfurt-Hahn, travel time is less than an hour (GPS or

map recommended). From Cologne: head for the A 61 in the direction of Koblenz/Mainz, leave A 61 at exit Pfalzfeld in the direction of St. Goar.

- **Sponsors:** This workshop is sponsored by the ArtistDesign and HiPEAC Networks of Excellence. The lead is with ArtistDesign and its cluster on Software Synthesis, Code Generation and Timing Analysis.
- **Organizer:** Prof. Dr. Peter Marwedel, TU Dortmund, Informatik 12, 44221 Dortmund, Germany. Phone: +49 231 755 6111; Fax: +49 231 755 6116; Please send all e-mails to: silke.sandmann <at> tu-dortmund.de
- **Attendance:** Active participation and top-level discussions are expected from all attendees. The meeting is open to all members of the ArtistDesign and HiPEAC Networks of Excellence. Non-members can be proposed to the organizer of the workshop, Peter Marwedel. If accepted, they are also allowed to attend the workshop.
 - **Speakers:** Potential speakers must submit a single-page abstract to silke.sandmann <at> tu-dortmund.de by April 22nd, 2011.
 - **Others:** Potential attendees who are neither ArtistDesign nor HiPEAC members must apply for attending the workshop by May 15th, 2011.
 - **Final registration:** Hotel registrations should be made directly with the hotel. Workshop registrations should be sent to silke.sandmann <at> tu-dortmund.de. Separate final hotel and workshop registrations have to be made by May 29th, 2011.

Due to the funding of the sponsoring networks of excellence by the European Commission, names of attendees must be published on the ArtistDesign web site. By registering to the workshop, you agree to being included in this list.

- **Workshop registration:** Please use the registration form enclosed below. The workshop fee is 120€.
- **Hotel reservation:** A limited number of rooms is blocked by the hotel for this event at a rate of 110 € /night). Please make your reservation directly with the hotel. Be sure to mention "ARTIST" as the scheme under which the arrangement has been made with the hotel. Phone and fax numbers are: Phone: +49 6741 802-0, Fax: +49 6741 802-802 (preferred booking). There is an online-booking facility (<http://www.schloss-rheinfels.de/englisch>), but it is only partially available in English and the "ARTIST" scheme cannot be specified. Room allocation policy is: first come, first served. Additional rooms may be available in the small city of St. Goar, but they would not have the same nice view and rooms next to the railroad track should be avoided.
- **Grants:** ArtistDesign *affiliates* of the Software Synthesis, Code Generation and Timing Analysis cluster can request hotel fees (single nights, no spouses, room and breakfast only) to be covered and directly paid by the ArtistDesign network.
- **Dates:**
 - **Submission of abstract for potential speakers:** April 22nd
 - **Notification of acceptance:** April 29th
 - **Applications for attendance of non-ArtistDesign/ non-HiPEAC members:** May 15th
 - **Hotel registration, General workshop registration:** May 29th
- We recommend sending your information early, as the number of seats, rooms, talks etc. is limited.
- **More information:** Up to date information will be available at the following web site:
<http://www.artist-embedded.org/artist/map2mpsoc-2011.html>

Workshop registration for the 4th Workshop on Mapping of Applications to MPSoCs

Schloss Rheinfels, St. Goar, Germany, June 28-29th, 2011

Please send to Mrs. Silke Sandmann, silke.sandmann <at> tu-dortmund.de

or send by fax: +49 231 755 6116

I hereby register for the above mentioned workshop.

First name:

Last name:

Organization:

Address:

Country:

e-mail:

I would like to give a presentation entitled (send this mail by April 22nd if marked):

The abstract of my presentation is enclosed (1 page).

I will be booking a Rheinfels Castle hotel room . I will be staying elsewhere .

I am a (full) member of the following networks and EU projects:

I am an affiliate of the following EU networks:

I am an affiliate of the ArtistDesign cluster on Software Synthesis, Code Generation and Timing Analysis and would like my hotel fee to be covered by the ArtistDesign network. I understand that payment information will nevertheless be required for the hotel registration.

Sponsors will not be liable for any accidents or harm caused during the participation in the workshop.

I confirm that I will attend the workshop.

Cancellation policy: Cancellations will be accepted until end of May. Cancellations of the workshop have no impact on the cancellations of hotel rooms. The cancellation policy of Schloss Rheinfels applies for all cancellations of hotel rooms.