CRC 1173 Waves Phenomena – Annual Meeting 2018 – Agenda and Information

April 9th to 13th, 2018, Haus der Kirche, Dobler Str. 51, 76332 Bad Herrenalb: <u>http://www.hdk.ev-akademie-baden.de/</u>

(updated April 12, 2018)

Bad Herrenalb can be easily reached by car or by public transport. Information (in German) about travel options to the venue is available here: <u>http://www.hdk.ev-akademie-baden.de/html/anreise509.html</u>

Timetables of the public transport system can be found here: http://en.kvv.de/

General information

The meeting will start on Monday (April 9th) at 10 am and will end on Friday (April 13th) after lunch. A welcome coffee with pretzels is offered at 9:30am on Monday.

Accommodation for registered participants is reserved according to the details you gave. NOTE: If there are any changes to your attendence, please let us know right away (admin@waves.kit.edu).

Registered participants will have full board. Breakfast is only provided for those who stay overnight at the Haus der Kirche though.

The conference room is equipped with beamer, laptop and flipchart. For the poster room, walls and pins will be provided.

Agenda

<u>Project presentations</u> are non-technical talks given by the PIs. Please bear in mind that we are a diverse group of different scientific backgrounds, so make the presentations comprehensible to all as far as possible:

- Continuing and new projects have max. 25 min talk plus 5 min discussion, they should focus on their prospective research plans
- Ending projects have max. 15 min talk plus 5 min discussion, they should focus on achievements past.

The <u>annual presentations given by PhD students</u> should focus on their own work. It is not necessary to explain what is done in other parts of the projects. Talks are max. 20 min plus 5 min discussion.

There are two <u>poster sessions</u> by the PhD candidates on their work during the week. The posters will be up and available throughout the week though.

Two <u>discussion rounds</u> should give us plenty of designated time to discover and discuss collaboration opportunities between our projects.

In the <u>software meeting</u> on Monday, we will collect and discuss the software written in the respective projects, the goal is to make useful code accessibly within the CRC and beyond.

During a <u>plenary discussion</u> we will discuss general aspects of the renewal proposal. MIND the <u>members' assembly</u> on Tuesday. If you are unable to come, let us know. The <u>social programme</u> on Wednesday afternoon, there will be a tour guided by Marlis Hochbruck and Wolfgang Reichel to the Teufelsmühle, which is roughly 14 kilometers.

Monday, April 9, 2018

10:00 – 10:30	Reception & Prelude
10:30 – 10:55	F. Hornung PhD talk
10:55 – 11:25	A5 Schnaubelt
11:25 – 12:25	Software meeting
12:30 – 13:30	Lunch
13:30 – 13:50	A9 Kunstmann/Weis
13:50 – 14:15	Hoose PhD talk
14:15 – 14:55	C4 Dörfler/Koos/Rockstuhl
14:55 – 15:25	B3 Jahnke/Koos/Reichel
15:25 – 15:55	Coffee break
16:00 – 17:30	Poster session I
18:00 – 19:00	Dinner

Tuesday, April 10, 2018

09:00 - 09:25	Haas PhD talk
09:25 – 09:55	C7 Arens/Fernandez-Corbaton/Griesmaier/Rockstuhl
09:55 – 10:20	Hagemann PhD talk
10:20 - 10:35	Coffee break
10:35 – 11:05	C1 Kunstmann/Rieder
11:05 – 11:35	B4 Plum/Rockstuhl
11:35 – 12:05	B7 Dössel/Loewe/Wieners
12:05 – 12:25	A8 Schneider
12:30 – 13:30	Lunch
13:30 – 15:30	Members assembly
15:30 – 16:00	Coffee break
16:00 – 16:25	Zeltmann PhD talk
16:25 – 16:50	Rheinbay PhD talk
16:50 – 17:15	Fernandez PhD talk
17:15 – 17:45	C2 Bohlen/Griesmaier/Rieder/Wieners
18:00 – 19:00	Dinner

Wednesday, April 11, 2018

09:00 - 09:25	Scheider PhD talk
09:25 - 09:55	AP2 Mandel
09:55 – 10:25	A2 Hochbruck/Lubich
10:25 – 11:25	Discussion I with Coffee
11:25 – 11:50	Buchholz PhD talk
11:50 – 12:20	A7 Hochbruck/Jahnke/Lubich
12:20 – 12:40	B6 Plum/Rottmann-Matthes
12:40 – 13:40	Lunch
14:00 – 18:00	Leisure Programme - Hike to the Teufelsmühle
18:00 – 19:00	Dinner (Barbecue)

Thursday, April 12, 2018

09:00 - 09:30	C6 Griesmaier
09:30 – 09:55	Freese PhD talk
09:55 – 10:20	Köhler PhD talk
10:20 – 10:50	A4 Hochbruck/Schnaubelt
10:50 – 11:05	Coffee break
11:05 – 11:30	Schmid PhD talk
11:30 – 12:00	B5 Lamm/Schörkhuber
12:00 – 12:30	A3 Dörfler/Wieners
12:30 – 13:30	Lunch
13:30 – 14:00	A1 Hundertmark/Kunstmann
14:00 – 14:20	B2 Hundertmark/Schnaubelt
14:20 – 14:50	A11 Anapolitanos/Hundertmark
14:50 – 15:20	Coffee break
15:20 – 15:50	B8 Feischl
16:00 – 17:30	Poster session II
18:00 – 19:00	Dinner

Friday, April 13, 2018

09:00 – 09:30	A10 Schneider/Reichel
09:30 – 10:00	A6 Plum/Reichel
10:00 – 10:20	B1 Schneider/Schratz
10:20 – 11:20	Plenary discussion
11:20 – 12:20	Discussion II with Coffee
12:30 – 13:00	Lunch

Current or Prospective Projects of the CRC 1173 (up to date)

Project Area A: Mathematical Foundations

A1 Random signals in nonlinear fiber optics

A2 Numerical methods for wave problems with nontrivial boundary conditions

A3 Adaptive implicit space-time discretization for wave equations

A4 Time integration of Maxwell equations

A5 Qualitative behavior of nonlinear Maxwell equations

A6 Time-periodic solutions for nonlinear Maxwell equations

A7 Numerical methods for highly oscillatory problems

A8 Failure of amplitude equations (ending)

A9 Spectral methods for dispersive equations (ending)

A10 Modulating fronts and pulses in periodic media (new)

A11 Propagation of waves and particles in systems with magnetic fields (new)

Project Area B: Dynamical Models

B1 Klein-Gordon-Zakharov systems in high-frequency regimes (ending)

B2 Dispersion Management (ending)

B3 Frequency combs

B4 Effective characterization of optical metamaterials beyond a local response

B5 Biharmonic wave maps

B6 Stability of patterns for hyperbolic-parabolic equations (ending)

B7 Dynamics of electro-cardiac depolarization waves

B8 Theory and numerics of the coupled Maxwell-Landau-Lifshitz-Gilbert equations (new)

Project Area C: Identification and Design

C1 Local inversion for linear seismic imaging

C2 Seismic imaging by full waveform inversion

C4 Modeling, design and optimization of 3D waveguides

C5 Terahertz-Tomography for high resolution electro-optical detectors (new)

C6 tba (new)

C7 Optimal Design of Chiral Structures (new, former AP1)

Associated projects

AP2 Nonlinear Helmholtz equations and systems