#### ECS Meeting 12-14 March 2018

#### International Academic Forum Heidelberg (IWH: <u>http://www.iwh.uni-hd.de/index\_engl.html</u>)

organized by the ECS Karlsruhe

#### Program

### Monday, 12<sup>th</sup> March

- 12:00 Lunch
- 13:00 15:00 Power Point Karaoke<sup>(1)</sup>
- 15:00 15:30 Coffee break
- 15:30 17:00 Talk by Filip Sadlo (RKU)
- 17:00 18:30 General discussion
- 18:30 Dinner at IWH + Team building<sup>(2)</sup>

#### Tuesday, 13th March

- 08:00 09:00 Breakfast 09:00 – 10:30 Talk by Dominik Edelmann (DKFZ) 10:30 – 11:00 Coffee break 11:00 – 13:00 Breakout discussion<sup>(3)</sup> 13:00 – 14:00 Lunch 14:00 – 16:30 Heidelberg Castle + Tour 16:30 – 17:00 Breakout Presentation 17:00 – 18:30 Tool Promotion Talks<sup>(4)</sup>
- 18:30 Dinner in the city

## Wednesday, 14<sup>th</sup> March

08:00 – 09:00 Breakfast 09:00 End of the meeting

<sup>(1)</sup> As an ice-breaker, we think a small fun activity will be nice. We ask everybody to prepare a single slide (similar to or better even shorter ;-) than the slides at the Annual Meeting). You will be assigned a random partner who you need to brief shortly about your project. Your partner will then present your slide and vice versa. This way you will practice your presentation skills and we will get a short overview of everybody's progress.

## Please prepare one slide summarizing your work and bring it along to the meeting!

<sup>(2)</sup> A fun-packed evening awaits you! Be surprised! :-D

<sup>(3)</sup> In six breakout groups we will discuss topics that are relevant and of interest for us as ECS. The aim of the discussion is to prepare a creative and appealing presentation for the entire group (max. 3 min). The presentation could be for example in the format of a poster, a powerpoint presentation, a play or skit, a short video... There are no limits to imagination, so be creative! :-) Please think about which topics will be interesting to you. We are looking forward to fruitful and interesting discussions!

#### <u>Science</u>

1) The great challenge of identifying the limits of weather predictability

- Nice title, but what does it actually mean?
- What do we understand by predictability?

• How do we contribute to this challenge?

## <u>Outreach</u>

- 2) How can natural sciences reach out to society?
  - Who are potential target groups?
  - Which media channels can be used?
  - How can the public be reached effectively?
  - Can you think of topics which should not be communicated to society?
- 3) From theory to application: How to make use of W2W's knowledge?
  - Which concepts or findings from W2W might be (most) valuable for applications used by society?
  - What strategies can be pursued to transfer the knowledge into concrete applications?
  - What are potential target groups and what are the best platforms to reach them?
  - Looking beyond the horizon: How can we pave the way for applications in the long run (2nd phase)?

## Working perspective

4) Management and work optimization - current status and future perspective

- How does a working day look like? Are there ways to improve the work flow and time management?
- Will the way we work change due to the development of new technologies (programming, digitalization,...)?
- What would be a beneficial technology, strategies or tools to improve the work as a scientist?
- 5) Big data potentials and limitations
  - Data scientist "the sexiest job of the 21st century"?
  - How can data science and meteorology learn from each other?
  - Big data in geosciences Where do you see opportunities for new applications?

6) Job opportunities and career planning

- What are our expectations for our careers / jobs?
- What are our key qualifications / unique selling propositions?
- What are classical/alternative/emerging career paths and opportunities?
- What are requirements and implications of these paths?
- What are preparatory steps / how to get there?

<sup>(4)</sup> Tools can facilitate complex and exhausting tasks in our day-to-day business. Their development takes precious time, time that would not have been wasted if the author had known about the existence of a ready-to-use application. As part of the ECS Meeting, we want to offer you an information platform to share your favorite tools, so that others can save some time as well. ;-) By 'tools' we are referring to any helpful application, method or function that encounters you from booting to shutting down (e.g. a python/R package, Add-ons/Plug-ins, editors, or simply a powerful color map). It can, but does not necessarily have to, be related to science.

## We ask you to prepare two slides (2 min) about your favorite tool from which the others could mostly benefit.

Slide 1

Describe your tool in a (very) basic manner - be didactically creative (schematic, example plot, etc.) in explaining the core concept or idea but 'keep it simple, stupid'! As a test: Let somebody else explain to you what your tool does based on your slide. Slide 2

On the next slide, please mention the field and scope of application and hint at limitations. Try to convince the audience why they should add this tool to their toolbox. Don't forget to list basic references (no more than two), which are meant as a stimulus for further reading in case of interest.

# In order to avoid that a tool is presented twice, please enter your name and the tool in the following list.

Tool	Speaker_
Dynamic Time Warping	Michael Maier-Gerber
Kernel Density Estimation	Andreas Schlüter
Lagranto	Philipp Zschenderlein
xarray – using labeled data	Mirjam Hirt
wiebetaaltwat	Yvonne Ruckstuhl
R Markdown	Sebastian Lerch
Python multiprocessing module	Georgios Fragkoulidis
Mendeley	Kevin Bachmann
R Shiny	Peter Vogel
FAST (R)	Constanze Wellmann
ShareTheMeal	Christian Euler
Screen	Marlene Baumgart
Evince	Nikolas Porz
sed	Enrico Di Muzio
Overleaf	Florian Pantillon
Code::Blocks	Nina Crnivec
pyspharm (python)	Paolo Ghinassi
jucySSH	Florian Baur
vim	Tobias Kremer
VSCode	Karsten Hanser