

W2W PI retreat

15-16 March 2021

Online

Program

Monday 15 March 2021

- 13:00 – 13:15 Welcome and Introduction (Craig) [\[main room\]](#)
- W2W Strategy in Phase 2 and Phase 3
 - Feedback from the Scientific Advisory Board
 - Lump Sum funds – how much do we have and we will allocate it
- 13:15 – 14:15 Machine Learning and Big Data – Introductions from Panel [\[main room\]](#)
(see details on page 2)
- Overview on potential of ML in weather research (Lerch; 20')
 - Opening statements of panel members (Lerch, Westermann, Rasp, Spichtinger, Janjic; 5' per person i.e. 2 slides)
 - PI questions and general discussion
- 14:15 – 14:30 Coffee break [\[wonder.me\]](#)
- 14:30 – 15:30 Machine Learning and Big Data – Potential in W2W [\[main room\]](#)
(see details on page 2)
- Projects planned and needed
 - Expertise available and needed
 - Next actions
- 15:30 – 15:45 Briefing for group discussions on Day 2 (Craig) [\[main room\]](#)

The main room remains open for optional informal discussions.

Tuesday 16 March 2021

- 12:25 – 12:30 Short briefing (Craig) [\[main room\]](#)
- 12:30 – 13:30 Small group discussions #1 (see page 3 for details) [\[breakout rooms\]](#)
- 13:30 – 13:45 Coffee break [\[wonder.me\]](#)
- 13:45 – 13:50 Short briefing (Craig)
- 13:50 – 14:50 Small group discussions #2 (see page 3 for details) [\[breakout rooms\]](#)
- 14:50 – 15:20 Coffee break [\[wonder.me\]](#)
- 15:20 – 16:20 Plenary discussion on the outcome of the group discussions (6 topic coordinators; per person: 5' presentation + 5' general discussion) [\[main room\]](#)
- 16:20 – 16:25 Comfort break
- 16:25 – 17:30 Final discussion on W2W strategy planning [\[main room\]](#)

Panel discussion on Machine Learning and Big Data

Monday 15 March, 14:10-15:10, main room

What can W2W contribute to world-class research in this domain, and how should we pursue this in Phase 2 and in the Phase 3 proposal?

13:15 – 14:15 **Machine Learning and Big Data – Introductions from Panel** [\[main room\]](#)

- **Overview on potential of ML in weather research** (Lerch; 20')
Introduction, including for PIs who have not used these methods directly
- **Opening statements of panel members** (Lerch, Westermann, Rasp, Spichtinger, Janjic; 5' per person i.e. 2 slides)
Viewpoints of panel members based on their own experience, supplementing overview talk
- PI questions and discussion of where W2W can have an impact

14:15 – 14:30 Coffee break [\[wonder.me\]](#)

14:30 – 15:30 **Machine Learning and Big Data – Potential in W2W** [\[main room\]](#)

For each of the three topics, each panel member will be offered the chance to give a short statement, then discussion will be opened for all participants

1. **Projects planned and needed:** What research is already planned in Phases 2 and 3? Are there any important gaps that are not addressed in current plans?
2. **Expertise available and needed:** What expertise do we have already within W2W, and what is urgently needed? How can we use our limited resources to meet these needs?
3. **Next actions:** What should W2W be doing in Phase 2 and in the Phase 3 proposal (planning, meetings, training, recruiting, exploratory studies, etc.)

Small Group Discussions

Tuesday 16 March, 12:30-13:30 and 13:50-14:50, breakout rooms

The discussion of the different aspects of W2W strategy will be held in groups of 5 or 6 people, to ensure that we obtain the input of every PI.

- We will take 1 hour to discuss the first three 3 topics, and then after the coffee break change to different groups for a second hour on the next three topics.
- Each group should produce one ppt slide for each of the three topics, and send it to the Topic Coordinator immediately at the end of the session.
- The Topic Coordinator will merge the six slides from the different groups and present a summary in the plenary session (per topic: 5' presentation + discussion). All participants should meet in the wonder.me area during the second coffee break to prepare for the plenary discussion and assist the topic coordinators if necessary

12:30-13:30 Small group discussions #1: Core priorities and actions to take

1. **Scientific priorities:** In addition to machine learning, what areas should the CRC focus on, and how can we support this with our lump sum funds?
2. **Tools and infrastructure:** What are our top priorities, and are there new opportunities that we could support?
3. **Interactions with ECS:** How can we take advantage of W2W to encourage and improve our best practices?

13:50-14:50 Small group discussions #2

4. **Joint activities:** What are the opportunities for review papers, conferences, etc. where W2W can lead the global community?
5. **Transfer to operational community:** What does our produce that can be transferred to users such as the weather services, and how can W2W support the transfer?
6. **Dissemination and outreach:** How can we build on our dissemination strategy to increase our impact on scientists and society?