

# Tentative Agenda

We plan to organize the week around four topical sessions, each dedicated to a specific research theme. Every session will include a topic introduction, followed by several short lightning talks (volunteers needed), and ample time for interactive brainstorming and discussion. On Wednesday afternoon, we plan to organize a group excursion to encourage informal interaction and networking.

## Sunday (Jan. 11, 2026)

- Arrival and check-in at Schloss Dagstuhl

## Monday (Jan. 12, 2026)

Time	Agenda
9:00–10:30	Welcome and participant introductions
10:30–11:00	<i>Coffee break</i>
11:00–12:00	Session 1: Emerging Workloads and their Requirements <ul style="list-style-type: none"><li>• Topic introduction - Suren Byna</li><li>• Lighting Talk 1: Trends from an In-depth Study of I/O Traces - François Tessier</li><li>• Lighting Talk 2: What Are Our Design Objectives Now? - Jay Lofstead</li></ul>
12:00–13:30	<i>Lunch</i>
13:30–15:00	Breakout Session 1 - Discussion
15:00–15:30	<i>Coffee break</i>
15:30–16:15	Breakout Session 1 - Discussion Summarization
	<i>Walk back to main seminar room</i>
16:30–17:30	Plenary: Breakout session summary presentations and outlook
18:00	<i>Dinner</i>

## Tuesday (Jan. 13, 2026)

Time	Agenda
9:00–10:00	Report Writing of Monday's Session 1 discussions

10:00–10:30	Interactive poll and full-group discussion <ul style="list-style-type: none"> <li>• Identify the most popular research topics/questions</li> <li>• Propose additional topics</li> </ul>
10:30–11:00	<i>Coffee break</i>
11:00–12:00	Session 2: Emerging Storage Technologies and their Potentials <ul style="list-style-type: none"> <li>• Topic introduction - Chen Wang</li> <li>• Lighting Talk 1: HW-SW Co-Design Examples using Processing-In-Memory for AI Applications - Amelie Chi Zhou</li> <li>• Lighting Talk 2: Storage Patterns - Adrian Jackson</li> </ul>
12:00–13:30	<i>Lunch</i>
13:30–15:00	Breakout Session 2 - Discussion
15:00–15:30	<i>Coffee break</i>
15:30–16:15	Breakout Session 2 - Discussion Summarization
	<i>Walk back to the seminar room</i>
16:30–17:30	Plenary: Breakout session summary presentations and outlook
18:00	<i>Dinner</i>

### Wednesday (Jan. 14, 2026)

Time	Agenda
9:00–9:45	Report Writing of Tuesday's Session 2 discussions
9:45–10:30	Session 3: Explainable I/O for HPC Systems <ul style="list-style-type: none"> <li>• Topic introduction - Sarah Neuwirth</li> <li>• Lighting Talk 1: XIO: Toward eXplainable I/O for HPC Systems - Sarah Neuwirth</li> <li>• Lighting Talk 2: Current Gaps in the Explainability of Scientific Workflows - Orcun Yildiz</li> </ul>
10:30–11:00	<i>Coffee break</i>
11:00–12:00	Breakout Session 3 – Discussion
12:00–13:00	<i>Lunch</i>
13:00–15:00	Group Excursion / Activity (TBD)
15:00–15:30	<i>Coffee Break</i>
15:30–16:15	Breakout Session 3 – Discussion Summarization

	<i>Walk back to the seminar room</i>
16:30–17:30	Plenary: Breakout session summary presentations and outlook
18:00	<i>Dinner</i>

#### Thursday (Jan. 15, 2026)

Time	Agenda
9:00–10:00	Report Writing of Wednesday’s Session 3 discussions
10:00–10:30	Interactive poll and full-group discussion
10:30–11:00	<i>Coffee break</i>
11:00–12:00	Session 4: Performance Analysis, Optimization, and other Topics. <ul style="list-style-type: none"> <li>• Topic introduction - Shadi Ibrahim</li> <li>• Lighting Talk 1: The Promises of Persistent Streaming for HPC - Matthieu Dorier</li> <li>• Lighting Talk 2: I/O and Machine Learning: An Emerging Workload and a Promising Tool - Liem Radita</li> <li>• Lighting Talk 3: What If Computers Forget? - Jalil Boukhobza</li> </ul>
12:00–13:30	<i>Lunch</i>
13:30–15:00	Breakout Session 4 - Discussion
15:00–15:30	<i>Coffee break</i>
15:30–17:00	Breakout Session 4 - Discussion Summarization
17:00–17:30	Plenary: Breakout session summary presentations and outlook
18:00	<i>Dinner</i>

#### Friday (Jan. 16, 2026)

Time	Agenda
9:00–10:00	Report Writing of Thursday’s Session 4 discussions
10:00–10:30	Journal paper planning and next steps
10:30–11:00	Coffee break
11:00–12:00	Wrap-up discussion
12:00–13:00	Lunch

	Departure
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## **Structure of Each Topical Session (Tentative)**

### **Topic Introduction**

One participant will introduce the session topic, providing background and framing the key challenges and open questions.

### **Lightning Talks**

Participants will deliver short lightning talks related to the session topic. These talks aim to address the session's guiding questions and stimulate further discussion.

### **Brainstorming**

- Participants will be divided into 4 groups (5–6 people/group), each assigned to a brainstorming station with a list of seed questions related to the session topic.
- Each group will designate a scribe responsible for documenting discussion outcomes.
- Participants will also use real-time collaborative tools to jointly contribute to and validate the notes.
- Groups will brainstorm ideas for a fixed amount of time and record key points (e.g., via post-its) on a poster at each station.
- Groups will then rotate to another station, where they may refine or build upon ideas from previous groups.
- After all stations have been visited, the final group at each station will present a brief summary of the main findings and prioritize the identified aspects.

### **Plenary Discussion**

All participants will reconvene for a plenary discussion to compare and synthesize insights from the brainstorming and lightning talks. The goal is to identify common themes, open challenges, and key conclusions that will directly inform the planned journal paper.