

A photograph of a snowy mountain landscape. In the foreground, there is a large, dark, irregular rock formation that has been partially covered by snow, forming the letters 'ALP'. To the left of this, a tall metal signpost stands, featuring several directional signs and illustrations related to the area. The background shows a snow-covered slope with some evergreen trees and a small body of water or stream. The sky is overcast.

Small is Beautiful: The Value of Niche Gatherings

Christoph Hellwig & Richard Weinberger







WELCOME

CODER

Self-hosted environments for
agentic software development
Increase human productivity
Reduce AI risk

codex.com



Lizumerhütte Zirbenweg 1 ¼ h

 *Sektion Hall in Tirol*







Tue 30.09.2025

TIME	TOPIC	SPEAKER
07:00 - 08:00	Breakfast	
08:00 - 08:30	nvme-fc: FPIN link integrity handling	John A. Meneghini / Bryan Gurney
08:30 - 09:00	SAN security issues	Chris Leech
09:00 - 09:30	Tea Break	
09:30 - 10:00	PCIe NTB support for NVMET Subsystem	Maciej Grochowski
10:00 - 10:30	Improving zero-copy uses with unaligned io vectors	Keith Busch
10:30 - 11:00	RAID sucks (and what we can do about it)	Christoph Hellwig
11:00 - 11:30	Tea Break	
11:30 - 12:00	An introduction to debugging with drgn	Johannes Thumshirn
12:00 - 12:30	Python Based Filesystem Debug Tools	Richard Weinberger
12:30 - 13:30	Lunch	
13:30 - 19:00	ad hoc BOFs and hallway track (or hiking on your own)	
19:00 - 22:00	Dinner, Drinks and Socializing	

Alpine Linux Persistence and Storage Summit

September 29 to October 2 2025

Lizumerhütte, Tyrol, Austria

DETAILS

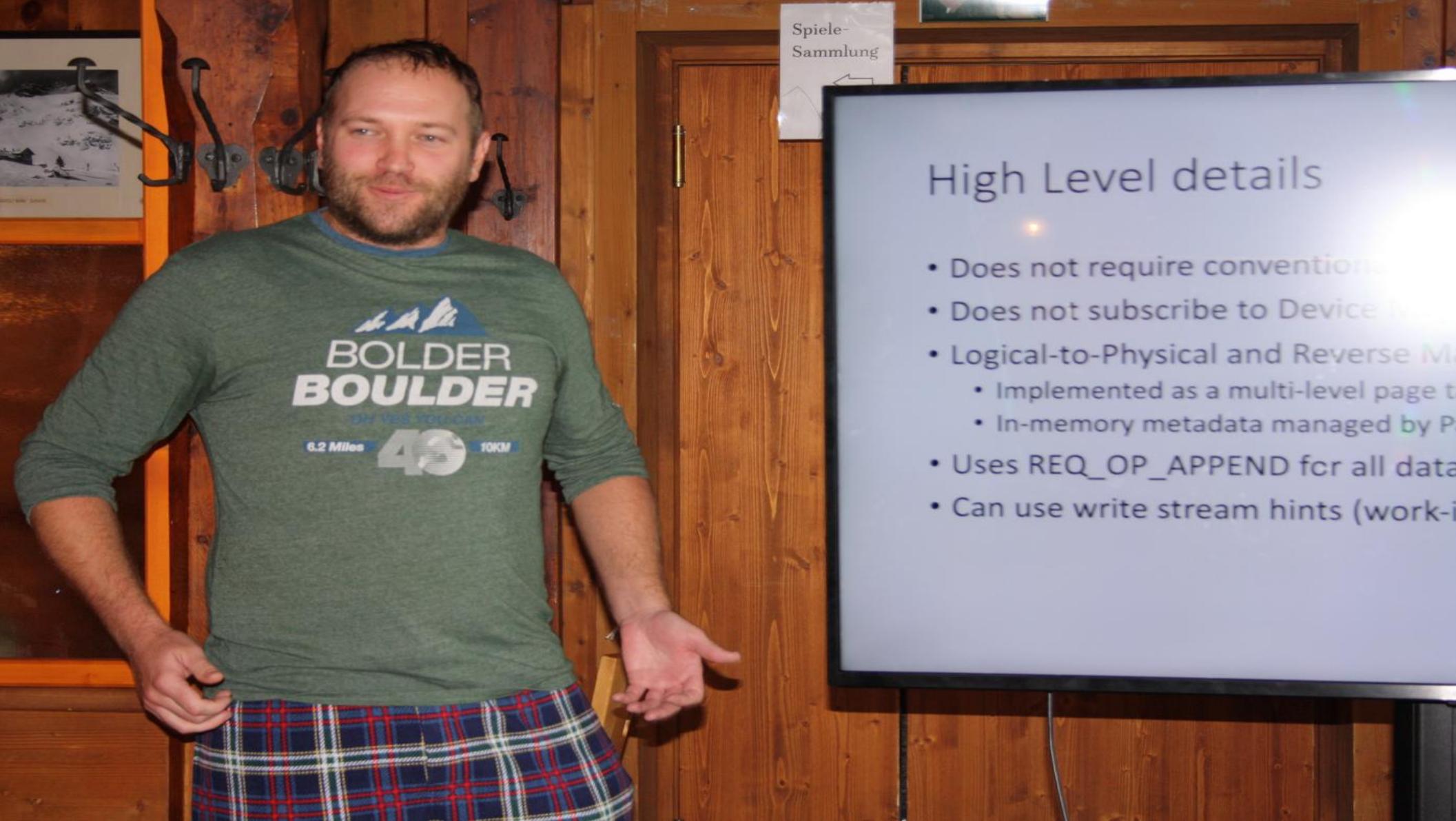
ATTENDANCE

SCHEDULE

- Overlapping tra
- Commercially a
- **Last zone** may

Samsung Semiconductor Denmark Res





High Level details

- Does not require conventions
- Does not subscribe to Device
- Logical-to-Physical and Reverse Map
 - Implemented as a multi-level page table
 - In-memory metadata managed by PageTable
- Uses REQ_OP_APPEND for all data
- Can use write stream hints (work-in-progress)



How we feel about presenting here



Child's drawing (c) Michael Wimmer

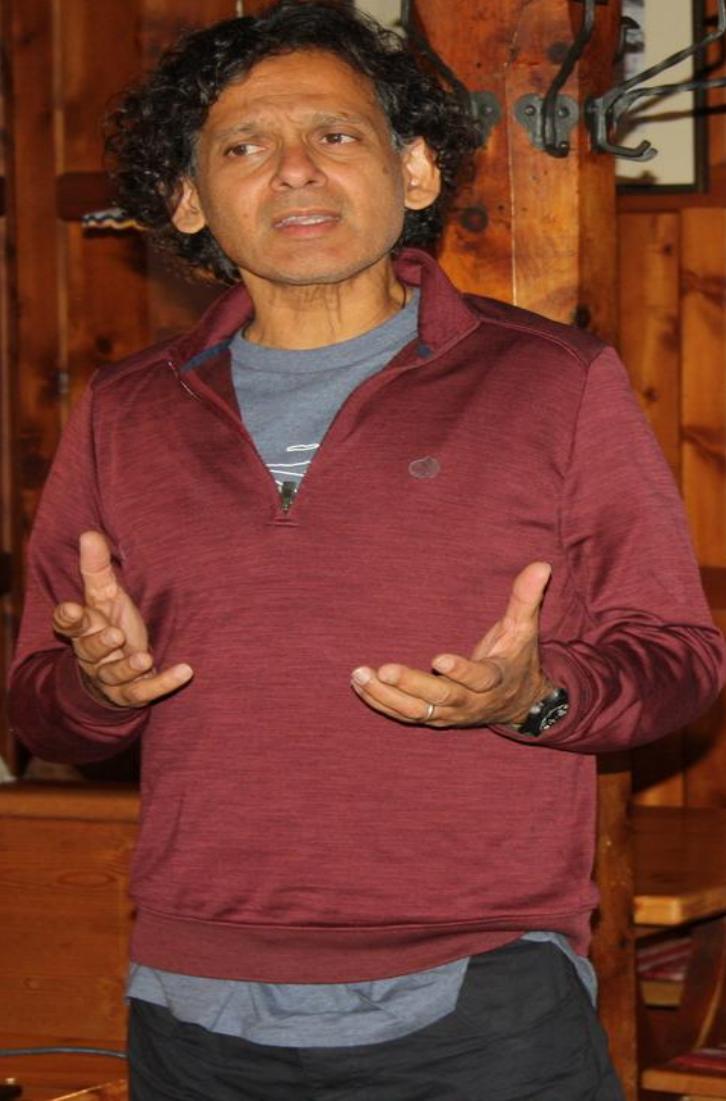


Vincent van Gogh's Starry Night

(Public Domain, via Wikimedia Commons, CC BY-SA 3.0)

MTD





01 Executive Summary 02 Business Challenges 03 Value Process 04 Solutions Benefits 05 Business Case

AI Challenges Facing the Enterprise

Managing AI Data is Complex

- Distributed data across core, cloud, edge
- Multimodal data formats
- Massive scale increases complexity

High Costs Derail AI Goals

- High demand for GPUs = low supply
- Massive DC, power and cooling costs
- S3 object costs skyrocketing

AI Requirements

- Inference high IOPs
- Training
- Millions

Reliability

- Governance
- 99.999%
- Unproven

```
graph TD; 1((1)) --- 3((3)); 2((2)) --- 3; 3 --- 4((4));
```

A diagram on the right side of the slide features a central circle containing three red dollar signs (\$\$). Four lines extend from this central circle to four numbered circles (1, 2, 3, 4) arranged in a diamond pattern around it. Lines connect circle 1 to circle 3, circle 2 to circle 3, and circle 3 to circle 4. Circle 1 is at the top-left, circle 2 is at the top-right, circle 3 is at the bottom, and circle 4 is at the bottom-right.





Grundgezer
Sentoren
Fuchs 1990

BoF Topics:

17:30 MTD → MTD Rock
17:45 NVMoF Auto connect
18:00 T-10DIF Support for NVMeOF (Zoned)
18:15 DRBD/LINSTOR "SDS" / NVMeOF
18:30 Pb/K - internals
18:45 Crash - python











Make It work.



Wir haben
kein U-Han
wir haben
nur
Schnaps







Thanks for your attention!
Questions?
Win a T-Shirt!