HLRN Parallel Programming Workshop
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WELCOME

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Trends in Processor Properties

- Moore’s law still holds but with lower slope
- Power limits resource usage
  - Dark silicon
- Clock stays or decreases
- Core count increases
  - Bandwidth gets worse with traditional RAM technology → High-Bandwidth Memory
- Functional units get wider
Topics of the Workshop

- Architecture of state-of-the-art of processor(s)
- Requirements for modern implementations
- How to optimize existing code or how to design new code?
- How to use (advanced) features of tools for code optimization?