

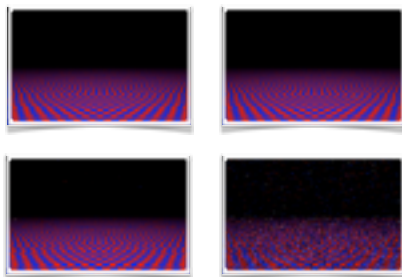
Approximate Storage in Solid-State Memories

Phase-change memory (PCM)

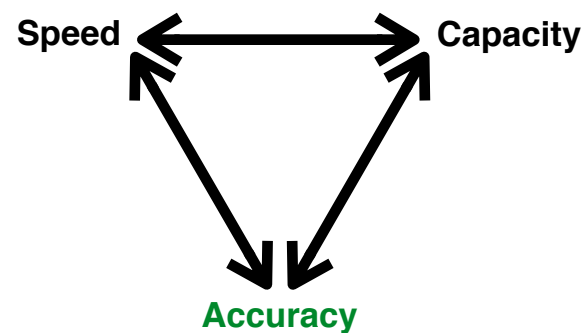
- May scale beyond the limits of DRAM and flash.
- Non-volatile.
- High-density MLC configurations can be slow.
- Cells wear out, limiting device lifetime.

Approximate computing

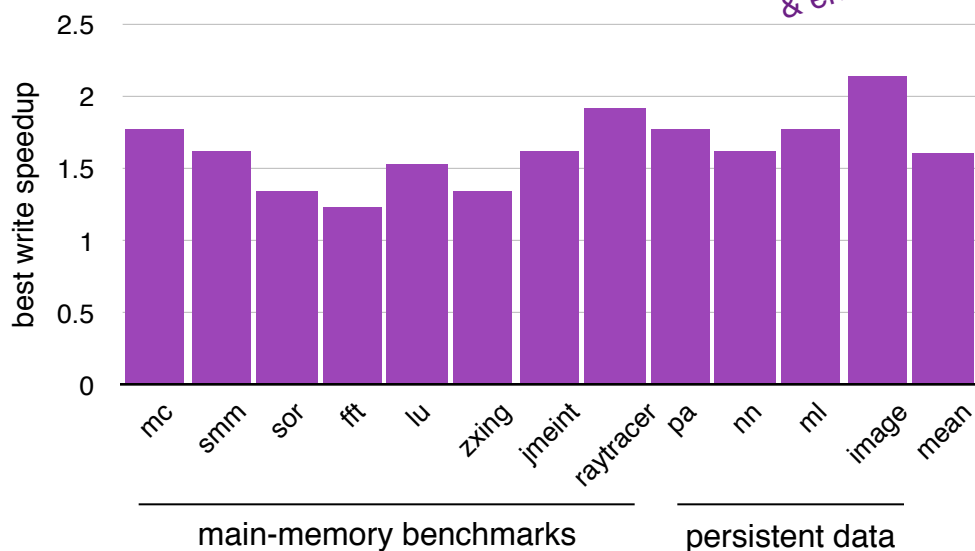
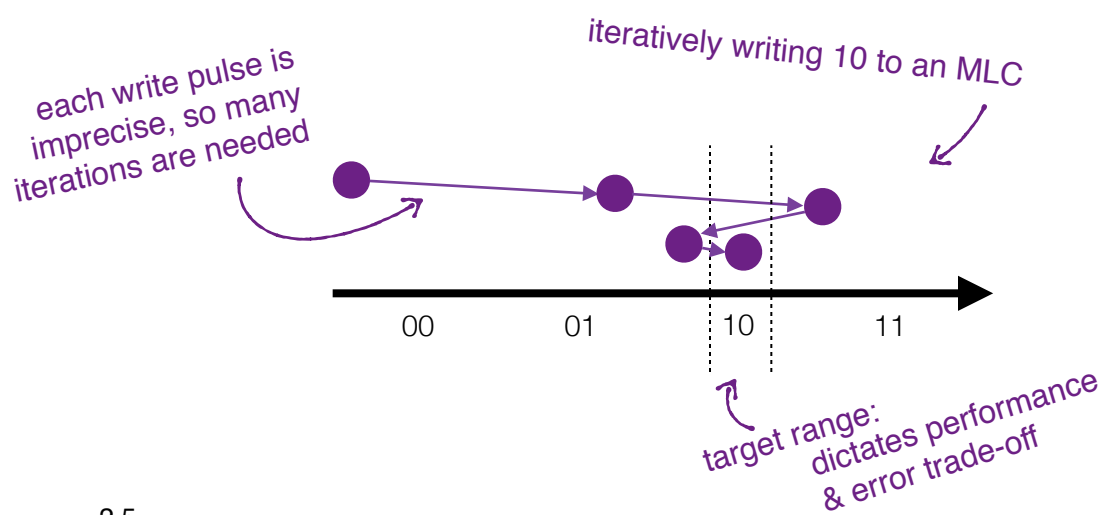
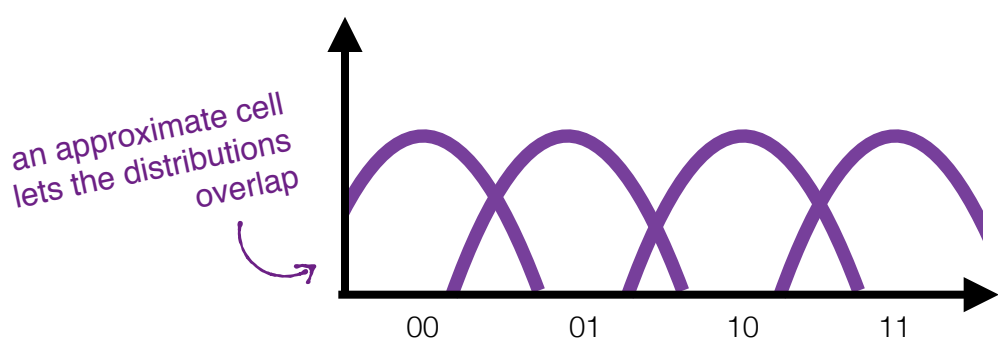
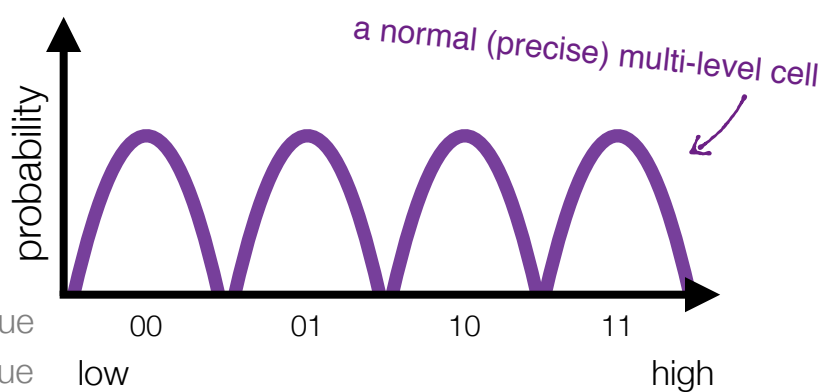
Much of the data in main memory and disk can tolerate occasional errors.



Faster, denser, more durable memories



Accelerate writes to multi-level cells.



Extend lifetime by reusing failed blocks.

