

Why Another Memory Control Scheme?



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FR-FCFS [ISCA'00]



Why Another Memory Control Scheme?

PAR-BS [ISCA'08]
STFM [MICRO'07]
FR-FCFS [ISCA'00]



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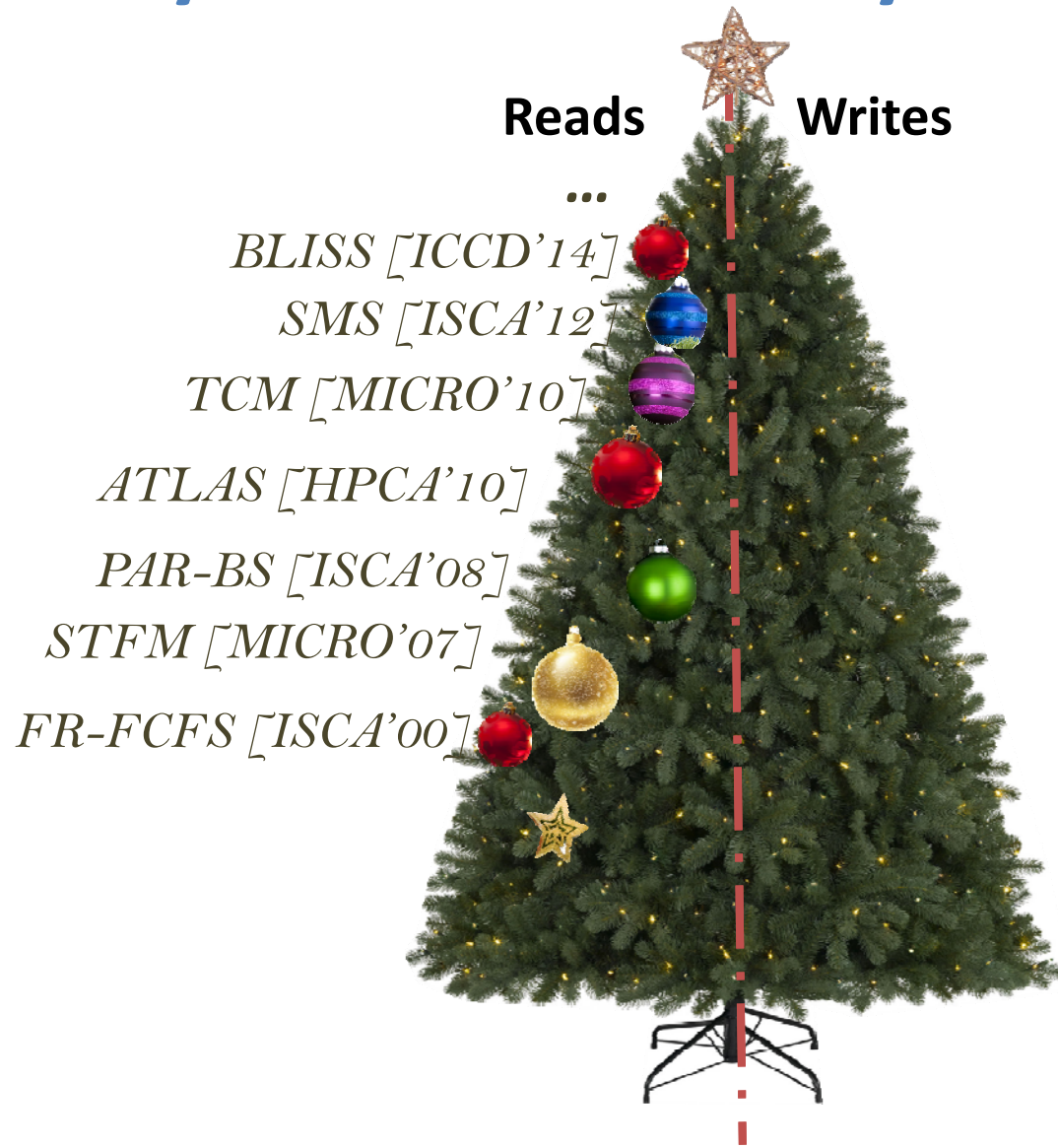
TCM [MICRO'10]
ATLAS [HPCA'10]
PAR-BS [ISCA'08]
STFM [MICRO'07]
FR-FCFS [ISCA'00]



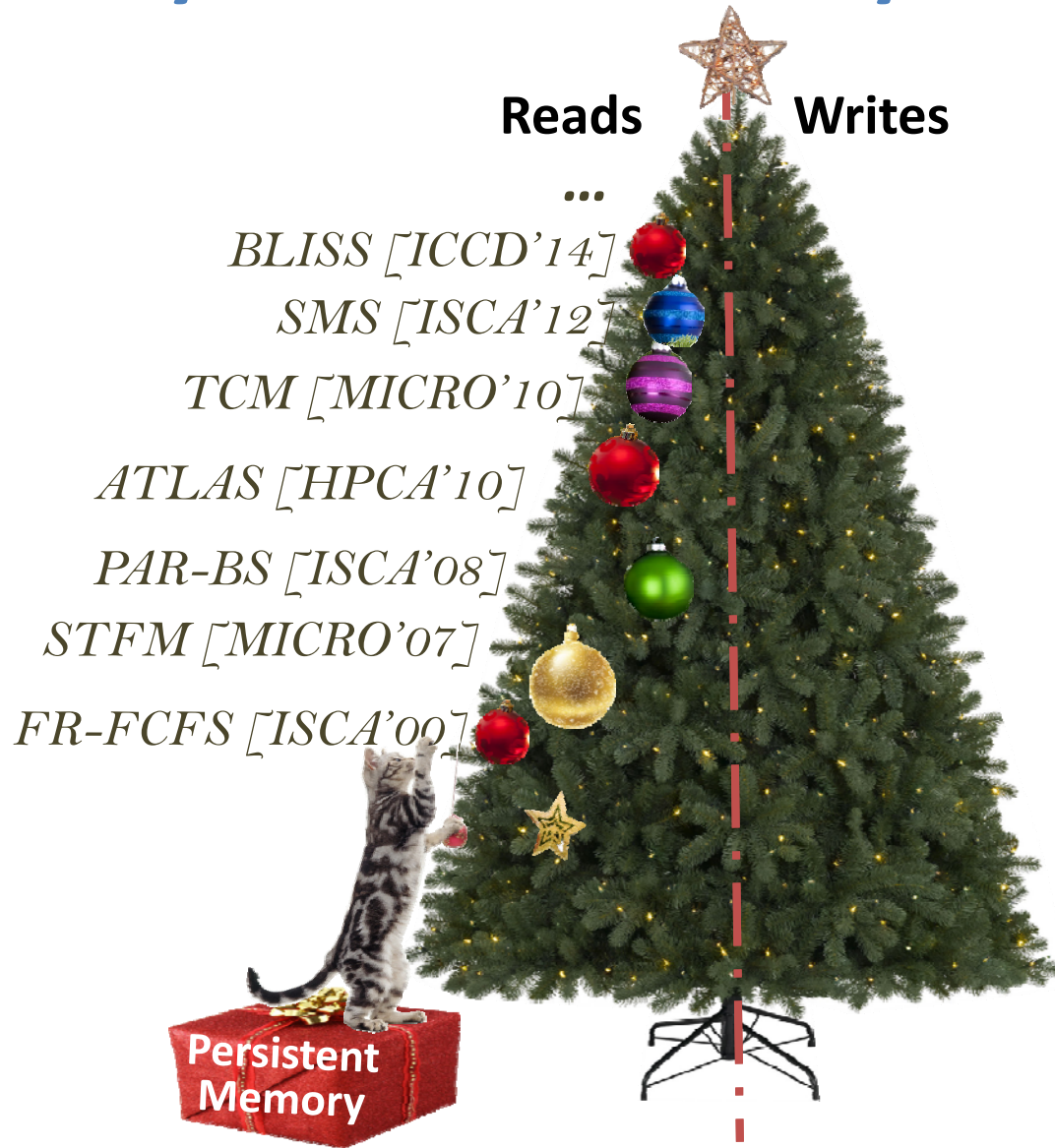
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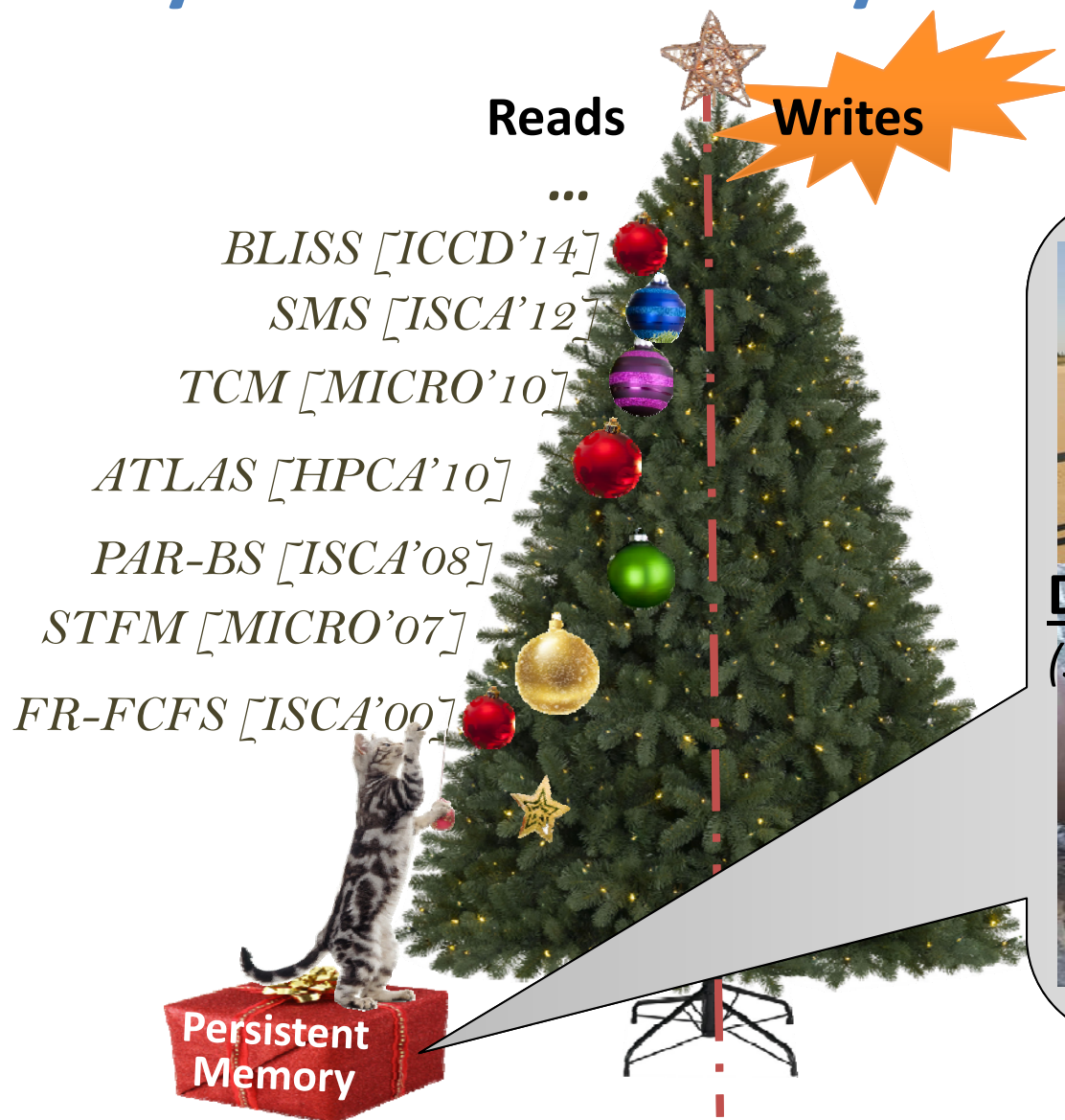
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Fast Load/Store
(Memory Attribute)

Data Persistence
(Storage Attribute)

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Our Design: Towards A **FIRM** Tree





Fairness



Performance

1.2x

vs. the best of
5 previous scheduler designs

Details about “FIRM”

Fair and High-Performance

Memory Control for

Persistent Memory Systems

Jishen Zhao

Onur Mutlu

Yuan Xie

HP Labs/Penn State/CMU

CMU

UCSB/Penn State/AMD Research



Presentation: Mon (Dec.15) 3:30 PM

Session 2A

(Room: Dining Hall)

Poster Session: Tue (Dec. 16) 12:00 PM



SAFARI Carnegie Mellon

