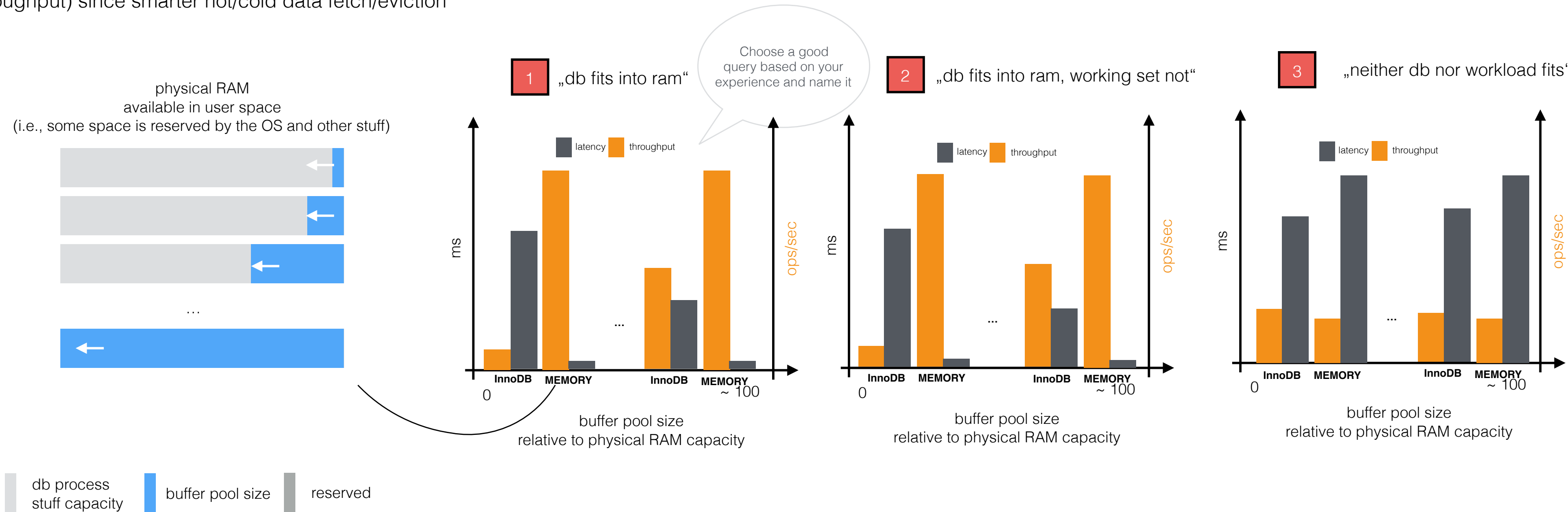


A

DB file in file on hard disk

> this experiment yields what happens when the number I/O with the db file is minimized (was done by others of course)
> we use this to show how our approach behaves in this context. Hypothesis: overhead we see is due to unsmart LRU not due to „db file lives outside the RAM“). Hopefully, we do far more better (i.e., „3“ has far better latency/throughput) since smarter hot/cold data fetch/eviction

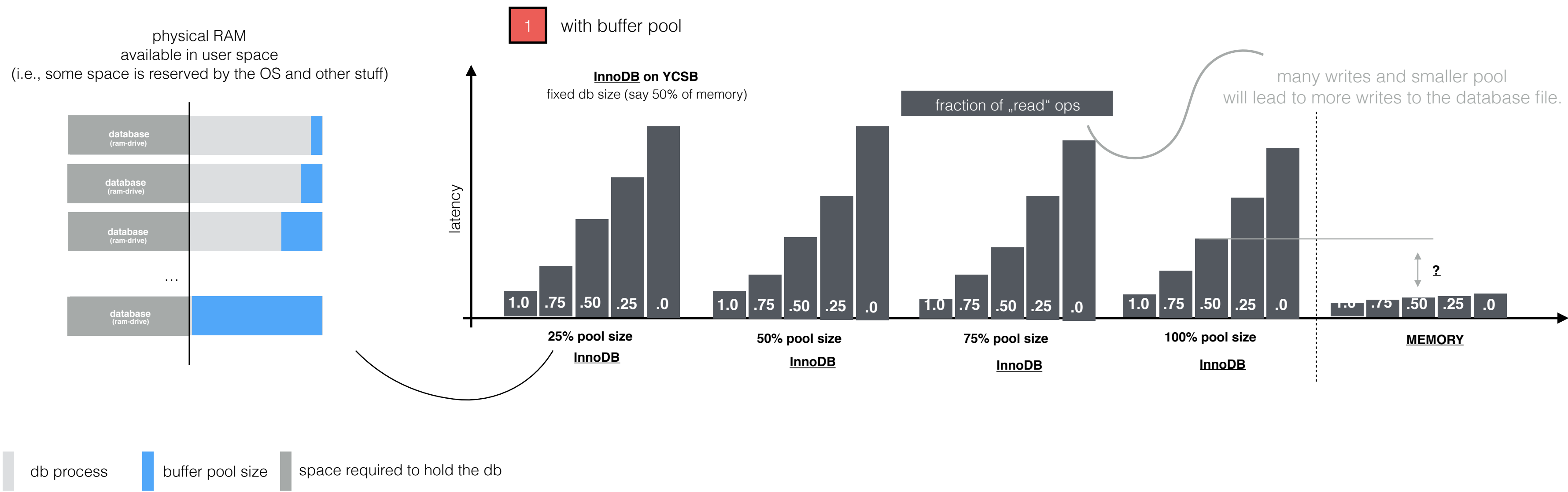


*Allows or denies statement
The feature „tuple id“ abstraction is the issue.*

B

DB file in file on ram-disk (which is mapped into main memory!), DB *must* actually fit into main memory here

> this experiment yields the plain „overhead“ for buffer manager indirection (disk I/O is removed)
> we will use this to compare our allocator against this. Hypothesis: Reason is „tuple pair“ abstraction we have less indirection due to moving „tuple“ abstraction into RAM. Hence, better throughput and lower latency



*Allows or denies statement
The feature „persistent db is not in RAM“ is not the issue.*