CoRAM: An In-Fabric Memory Architecture for FPGA-based Computing:

* The idea seems very interesting; I just wonder how the fpga’s work now with no memory at all or with very small memory?
* Another insight I hoped to see is how a fpga shares existing resources like the L 1,2,3 caches or ram memory in coherently with the main processor.
* Finally another important missing fact is what happens when there’s multiple layers? (copying the processor’s architecture)

Area-Efficient Near-Associative Memories on FPGAs:

* It seems that in Fig.5 Fast Value design doesn’t have misses but has same latency as Fast Match, so why using fast match? Also it is not clear to me what is the cost of a miss(false positive)
* Table III, how is it possible that the Theoretical conflict ratio for Libq Hmmer are so high 25%, 12.5% but in reality its 0.04 and 1.4 percent. That seems really odd.

A Study of Pointer-Chasing Performance on Shared-Memory Processor-FPGA Systems:

* What about security? If there’s shared memory and resources and we can change the pointers we can have a memory leak or even worse, malicious code.
* Does it operate in sequential code? They mentioned a couple of times that parallelism has a greater effect but it doesn’t implies that it works/doesn’t work without it.