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The person I talked to during lunch break was Riccardo Strina from UIC. He was a graduate student and focusing on publishing a paper on "Performance and power evaluation of Multi-GPU NCCL communication with unified memory". He aimed to evaluate the performance and power consumptions of NVIDIA Collective Communication Library usage in conjunction with UM, both under normal conditions. His results suggested how not only Unified Memory slowdown affects performance but also energy consumption. UM increases the energy consumption without bringing a favorable improvement across the board if only to a subset of communication APIs. Therefore pairing these technologies should be done only on specific conditions unless the performance cost is acceptable considering the pros of adopting Unified Memory. He said he did a lot of benchmarks on energy consumption for 8GB messages and summarizing all the results into a few graphs was hard since he had to omit many other results.