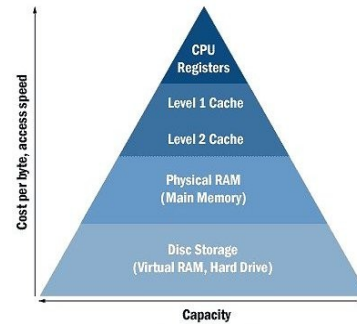


# Memory hierarchy

Data locality → memory access patterns



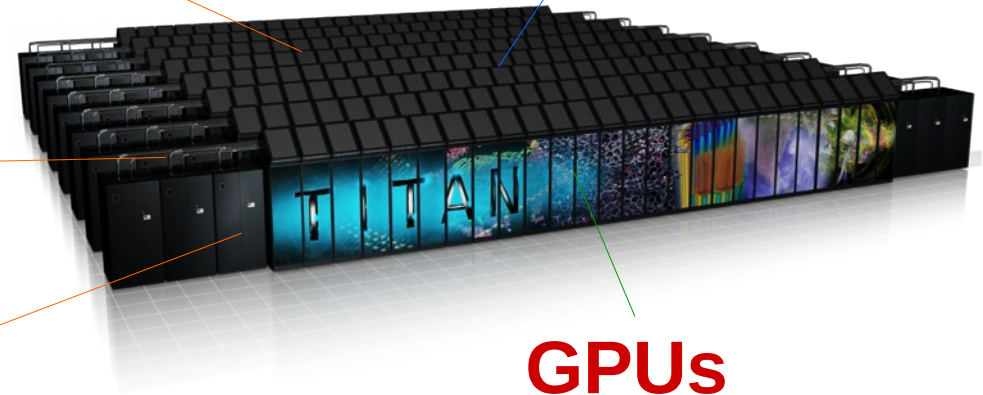
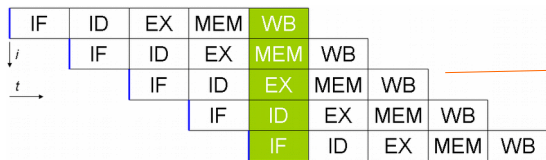
# Many cores

Efficient parallelism is complicated



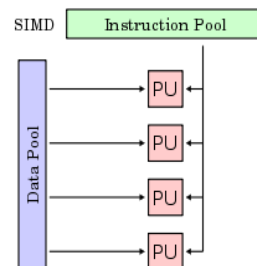
# Pipeline

Take care of the order of the instructions



# Vector support

Manipulate vector instead of scalar variables



# GPUs

Different architecture and paradigm than CPUs

