

# Midterm Review

Note Title 3/17/2009

why parallel computing  
nomenclature (Flynn)  
programming paradigms  
shared memory  
message passing  
producer-consumer example  
mutex  
PV  
barriers

parallel random number generation  
parallel apps  
weather/ocean sim  
N-body sim  
ray tracing  
monte-carlo sim  
discrete-event sim  
logic sim  
Gaussian elim

methodology  
decomp. → assign. → orchestration → mapping  
streaming paradigm  
cache coherence  
memory consistency  
coherence protocols  
m(o)(E)SI  
Dragon  
Token

read-modify-write inst  
t & s, xchg, fetch&op  
rd-sc  
building sync primitives  
r-m-w → mutex lock  
lock → barriers

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Open notes

NO prog. man. ARM or Intel

No computers

Resolve ambiguity on answer sheet