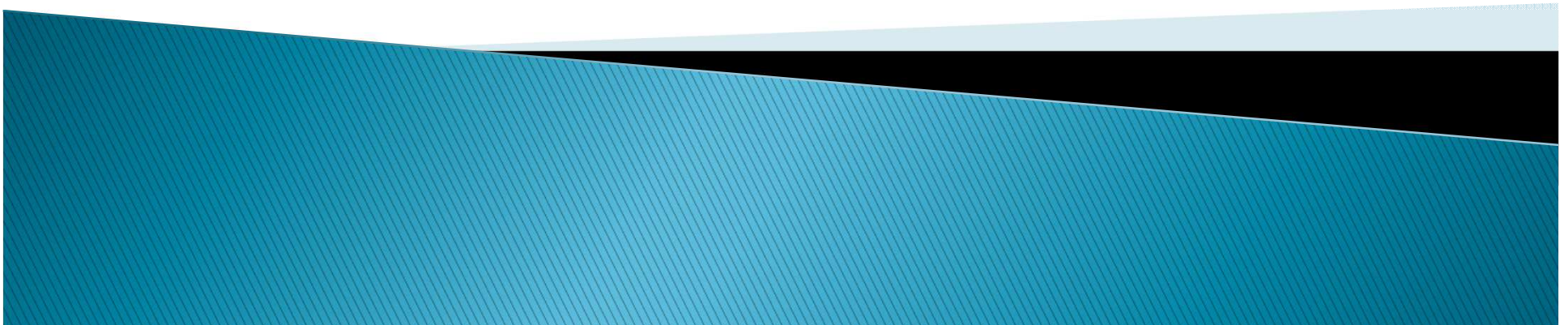


アムダールの法則

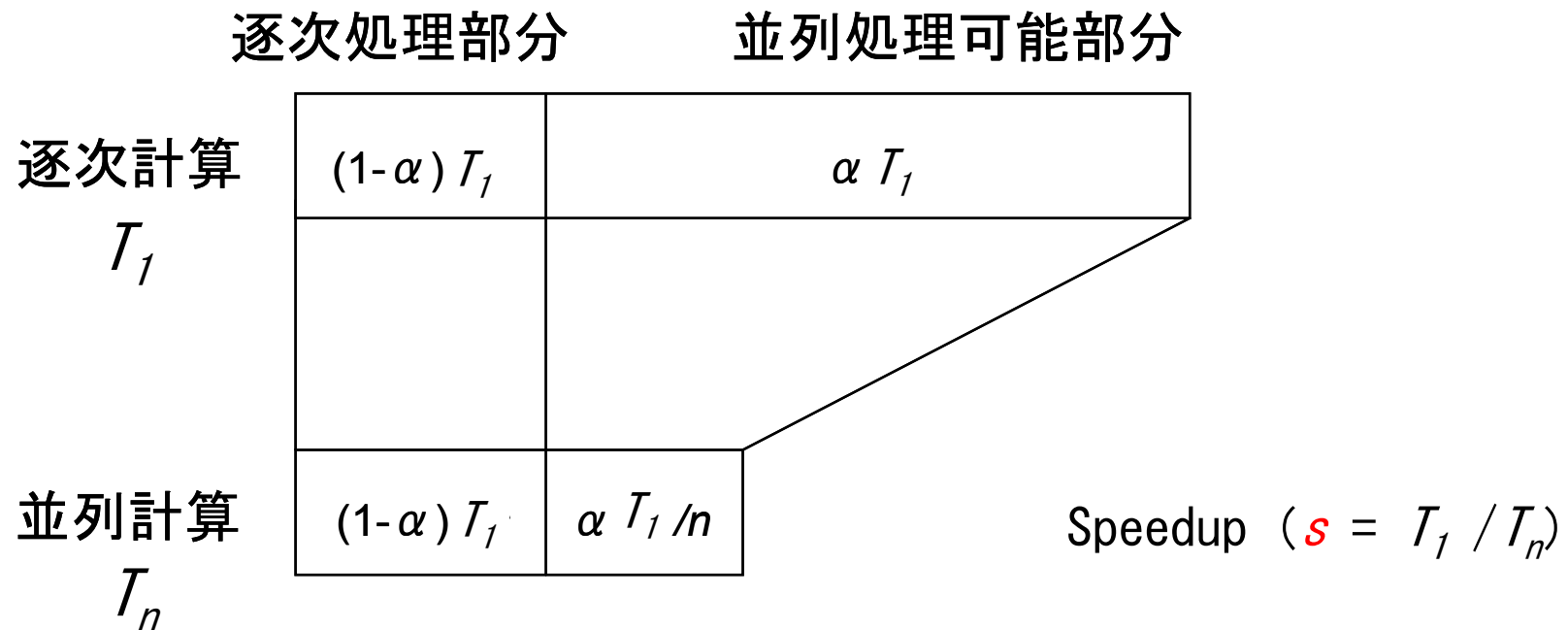
2014年9月19日
第14回FrontISTR研究会



Amdahl's Law (アムダールの法則)

並列化率 Parallelization ratio(α)

加速率 Speedup (s)

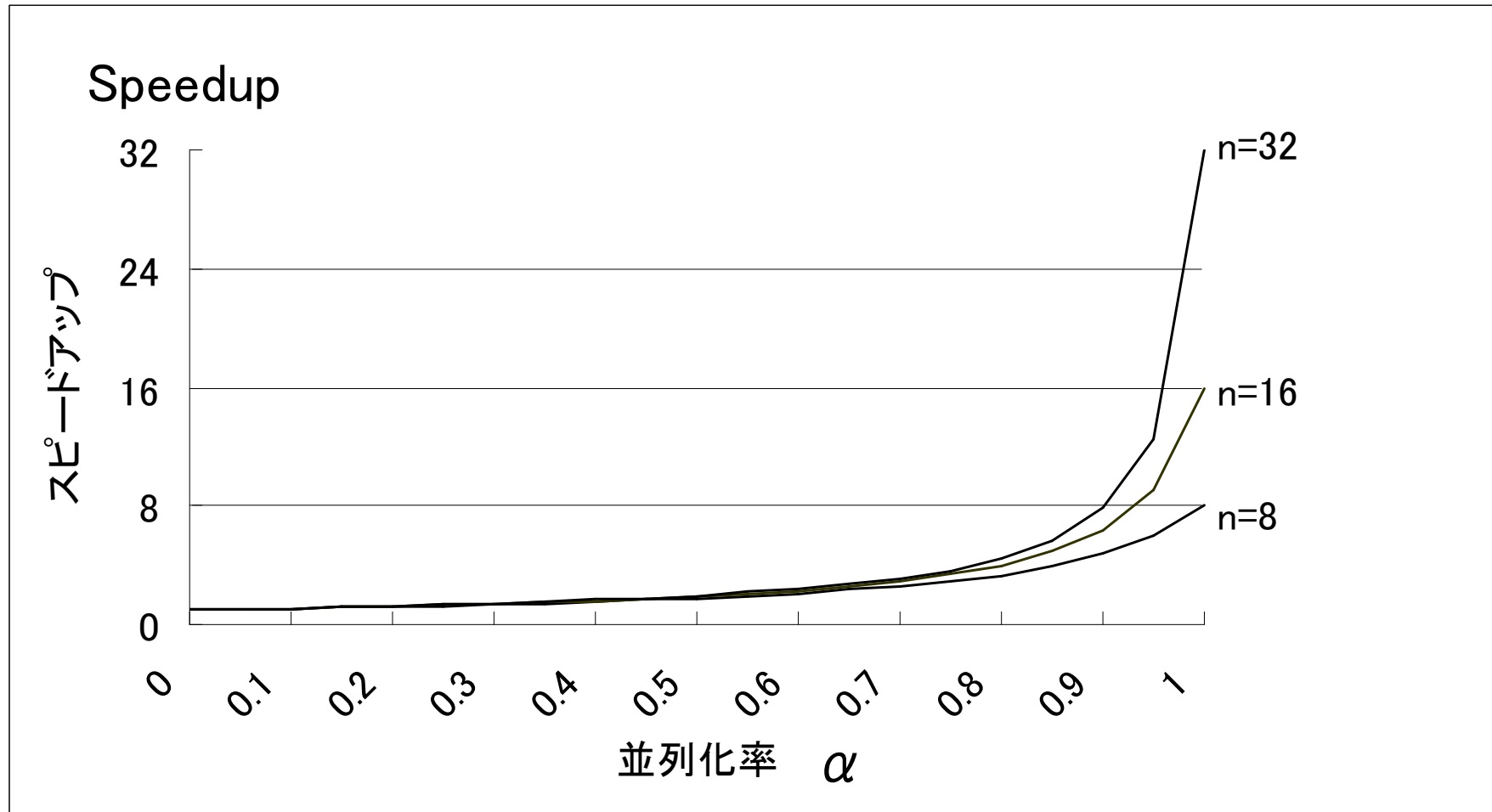


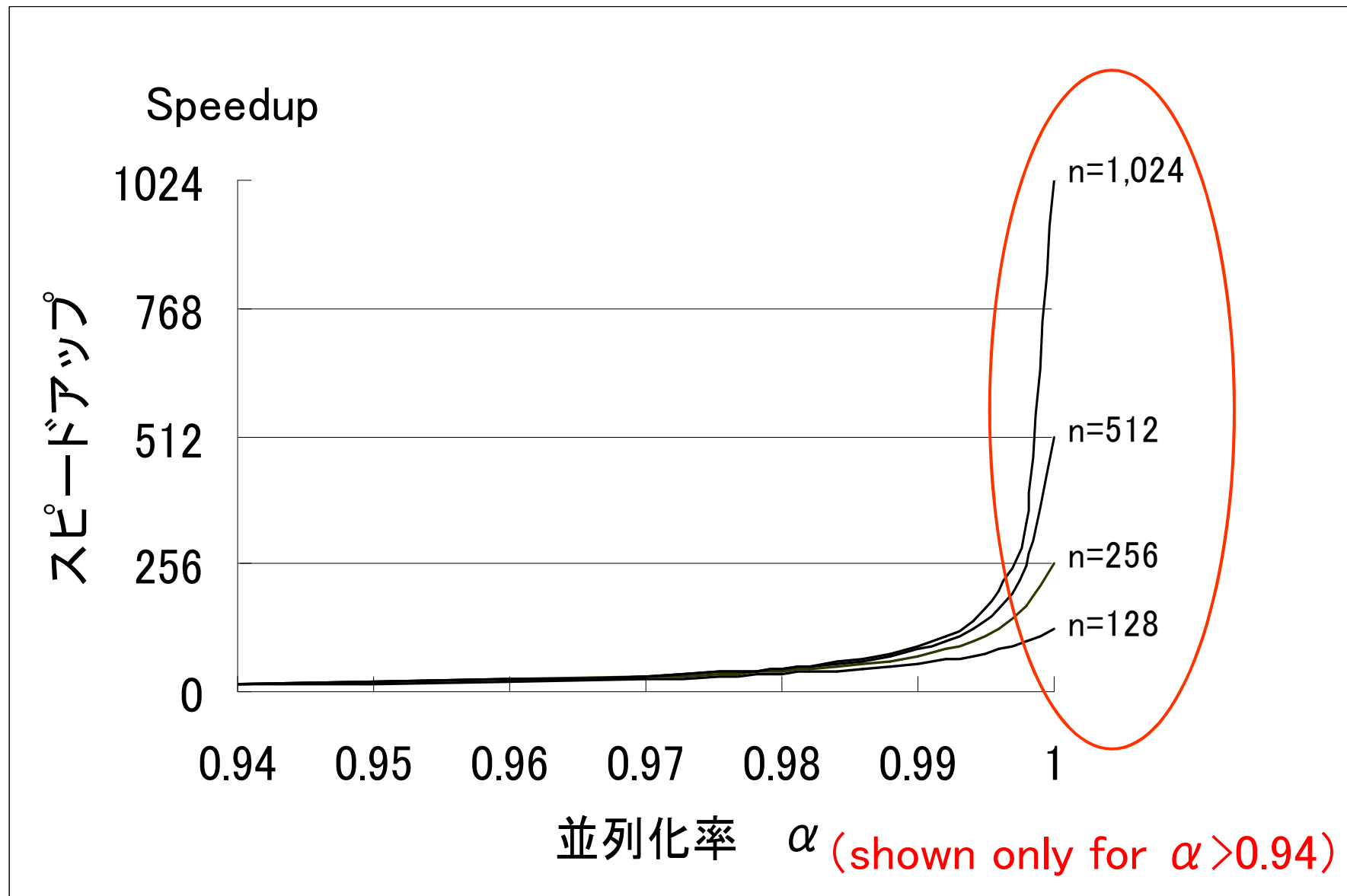
α : ratio of CPU-time spent for parts, which can be computed in parallel

n : number of processors

$$\text{Speedup} = T_s / T_p$$

Ideal speedup is n





地球シミュレータでの経験

→ 512nodes (n=4,096) で $\alpha = 0.999955$