

Parareal Algorithm

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Algorithm 1: Symmetric Diagonal N -body

Input: Replication parameter C .

Input: P processors arranged into C rows
and $T = P/C$ teams.

Input: Set \mathcal{T} of N particles and associated
charges and results.

- 1 In parallel on all processors, $r = \text{rank}$;
 - 2 Scatter particles from master to team
leaders, \mathcal{T}_t ;
 - 3 Broadcast \mathcal{T}_t from team leader to team
members;
 - 4 Copy \mathcal{T}_t , the set of targets, to \mathcal{S}_t , the set of
sources;
 - 5 Given c th member of team t , shift \mathcal{S}_t by c
along row;
 - 6 **for** iteration $i < 1$ **do**
 - 7 Compute symmetric interaction of \mathcal{T}_t
 and \mathcal{S}_t ;
 - 8 Reduce the results within a team;
 - 9 Gather the results between team leaders;
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3 Methodology

ROAR

1 Abstract

We LIKE TO PLAY LEAGUE.

2 Background

League is cool.