

Distributed Global Scheduling in Datacenters

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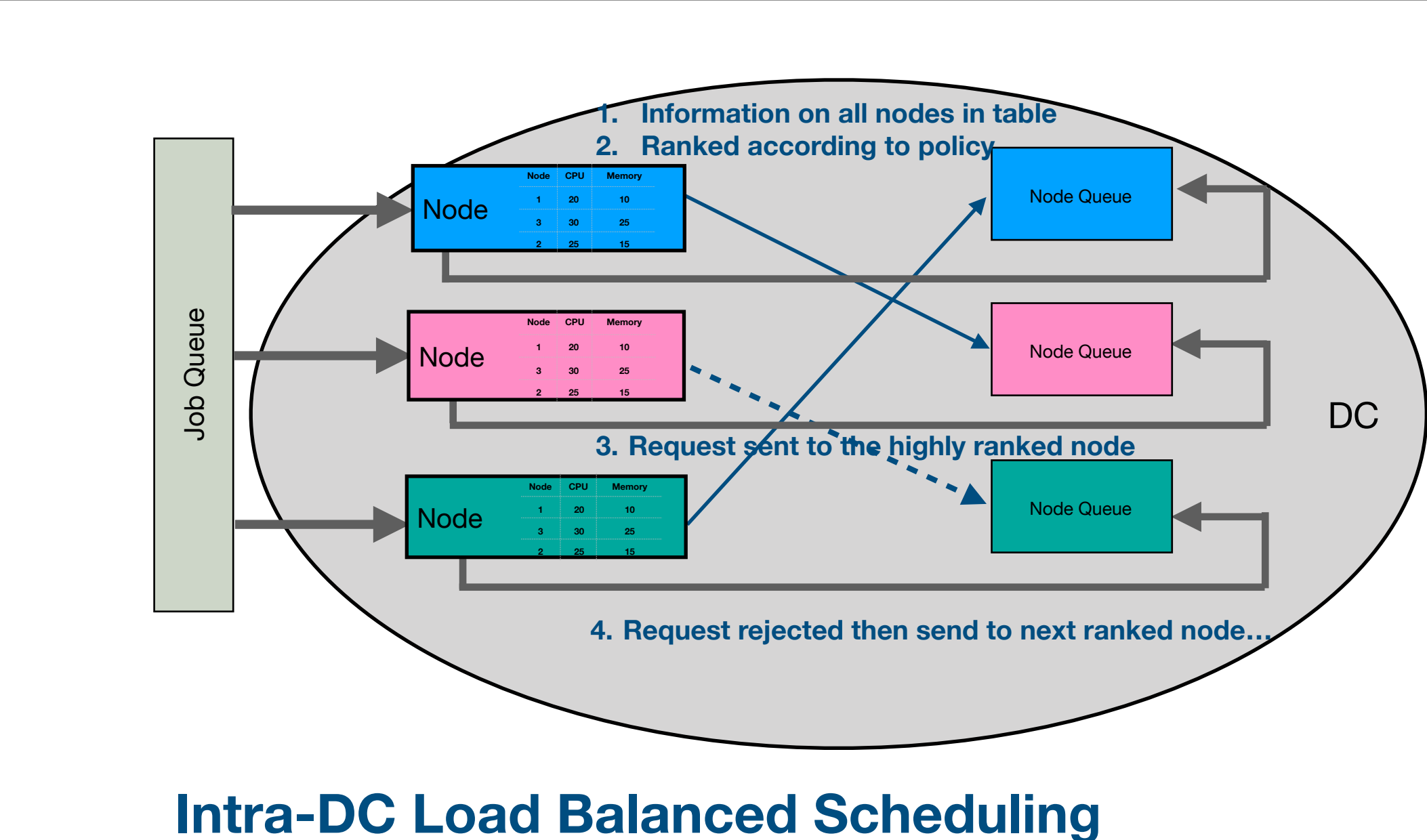
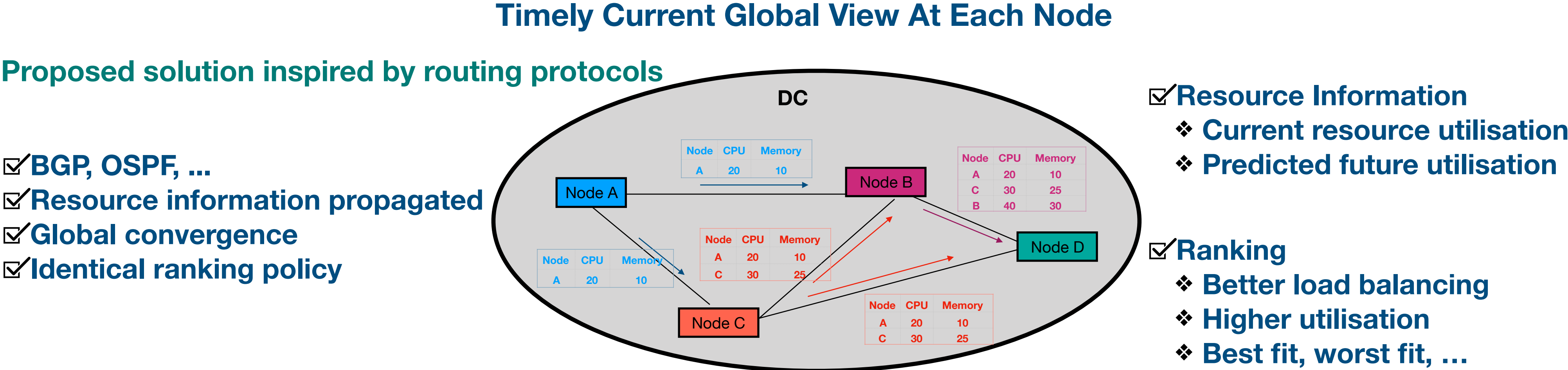
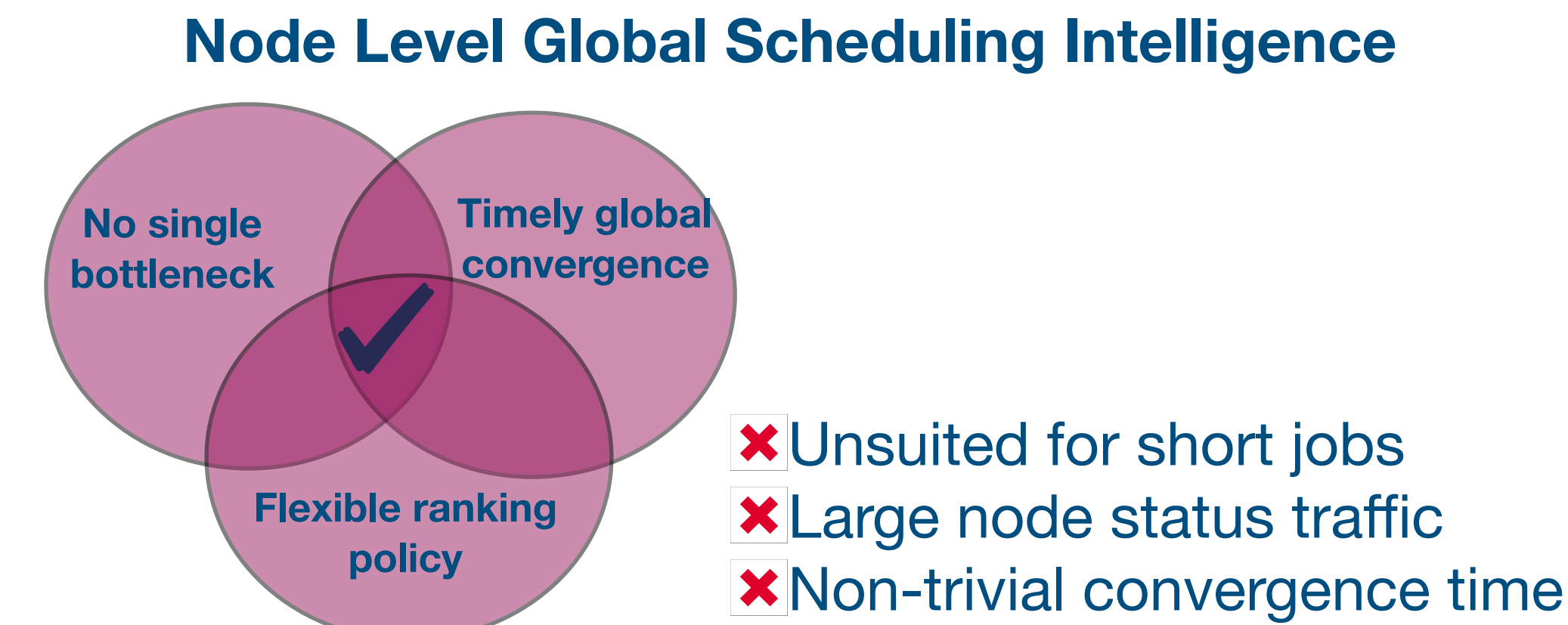
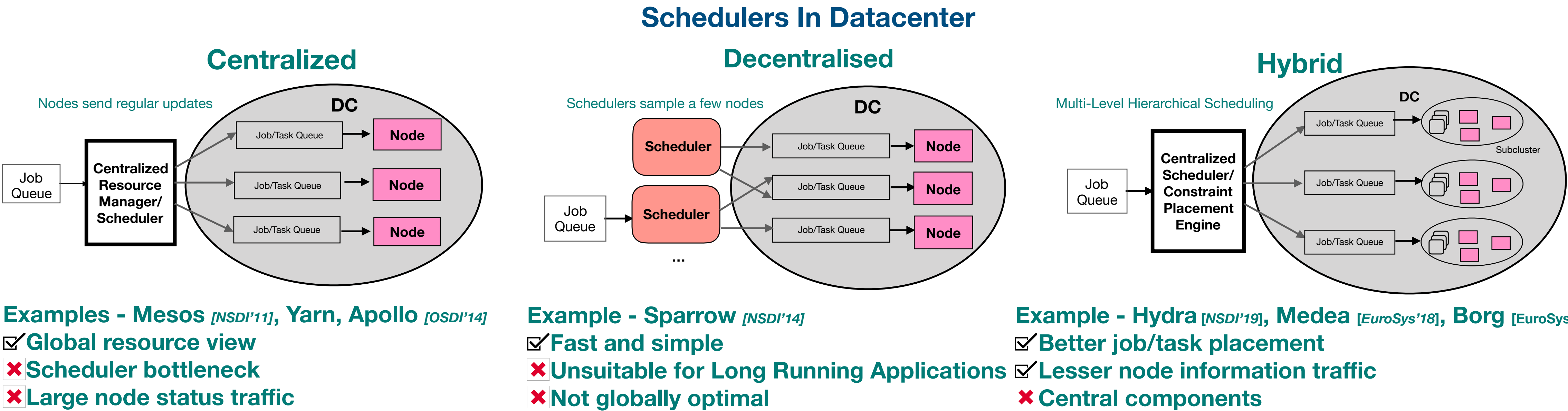
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Underutilised Datacenter resources

- Azure***
- ❖ 60% VMs have $\leq 20\%$ CPU usage!
- Alibaba**** -
- ❖ Server CPU - 50% and memory usage
 - ❖ Memory $\leq 60\%$
- 100MW DC*****
- ❖ 1% compute cycles = Small City Energy-Saving

Datacenter resources can be better utilised!

*Resource Central, SOSP'17
**<https://github.com/alibaba/clusterdata>
***Scalable system scheduling for HPC and big data, JPDC'17



Scheduling Using Timely Current Global View

- Various Design Approaches**
- Multiple job requests sent
 - Resource pattern learning
 - Suggestions?

