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Multiprocessor PCP /1

- Partitioned FPS with resources bound to processors [Sha, Rajkumar, Lehoczky, 1988]
 - The processor that hosts a resource is called the synchronization processor (SP) for that resource
 - It knows all the use requirements of all its resources
 - □ The critical sections of a resource execute on the processor that hosts that resource
 - Jobs that use remote resources are "distributed transactions"
 - □ The processor to which a task is assigned is the *local* processor for all of the jobs of that task

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Multiprocessor PCP /4 • If the global resource being acquired by task τ_l with priority lower than τ_h resides on the same SP as ρ_a then τ_h suffers an anomalous form of priority • This obviously exposes resource nesting to the risk of deadlock \rightarrow M-PCP disallows resource nesting \Box This is why other protocols want τ_h to spin

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■ With global resources hosted on > 1 SPs, resource nesting is not allowed as deadlock may occur

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