CSE 552
Global snapshots

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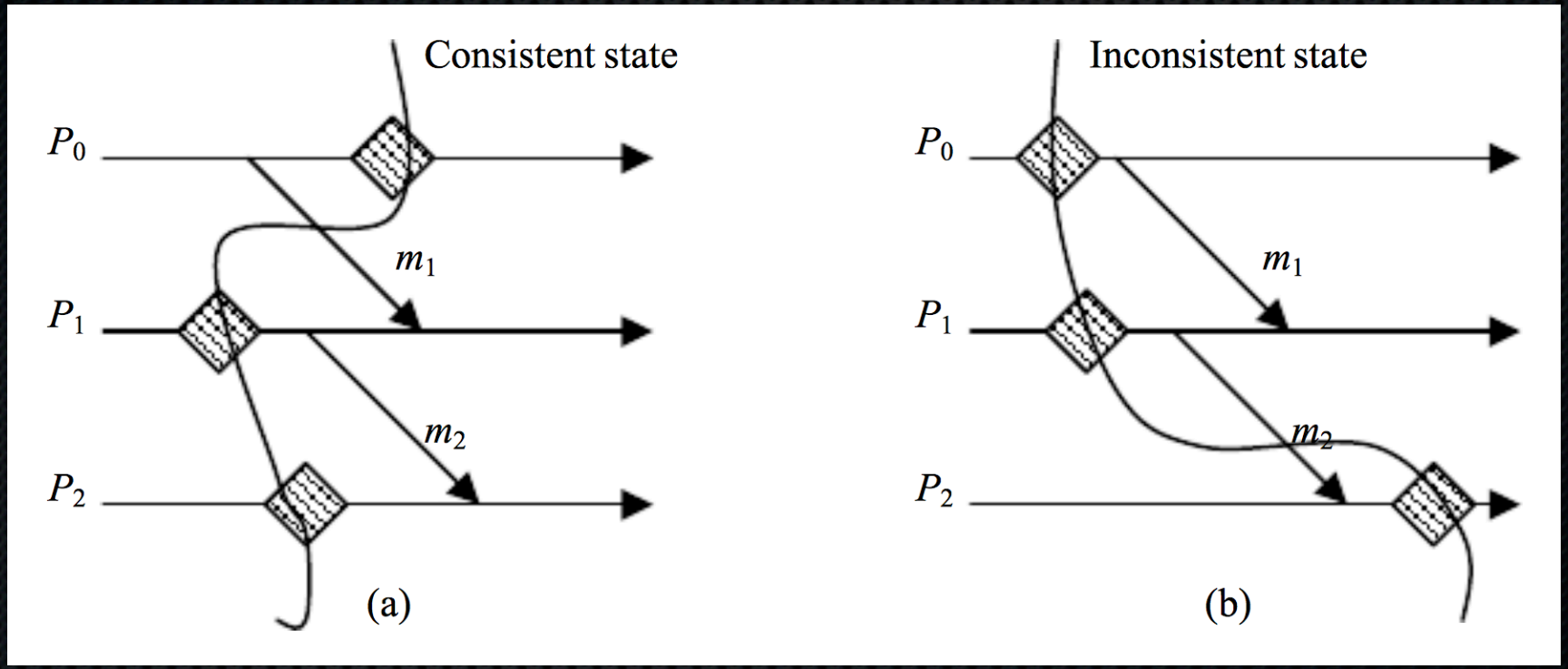
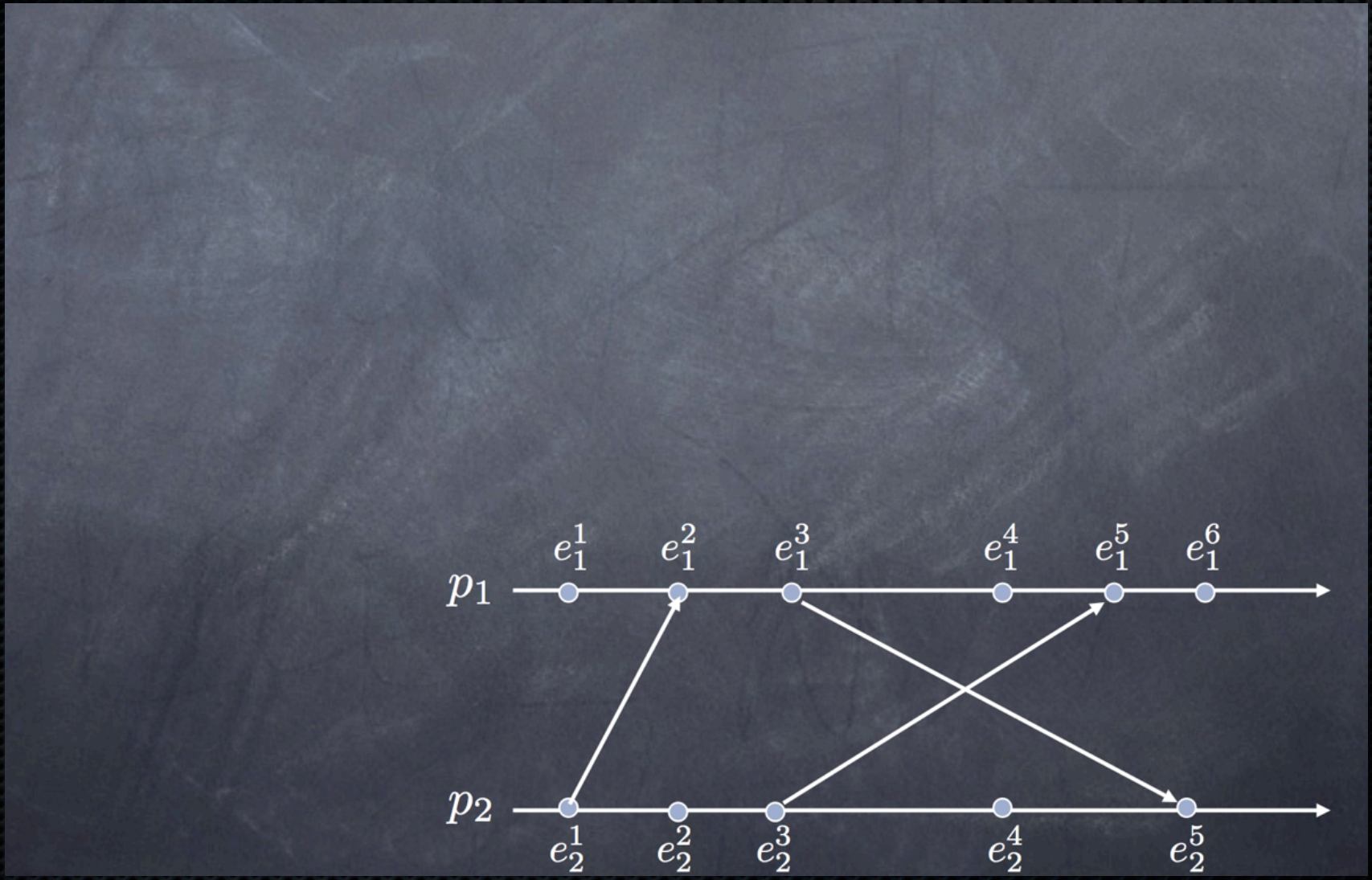
Consistent vs. inconsistent



Lattice of execution states



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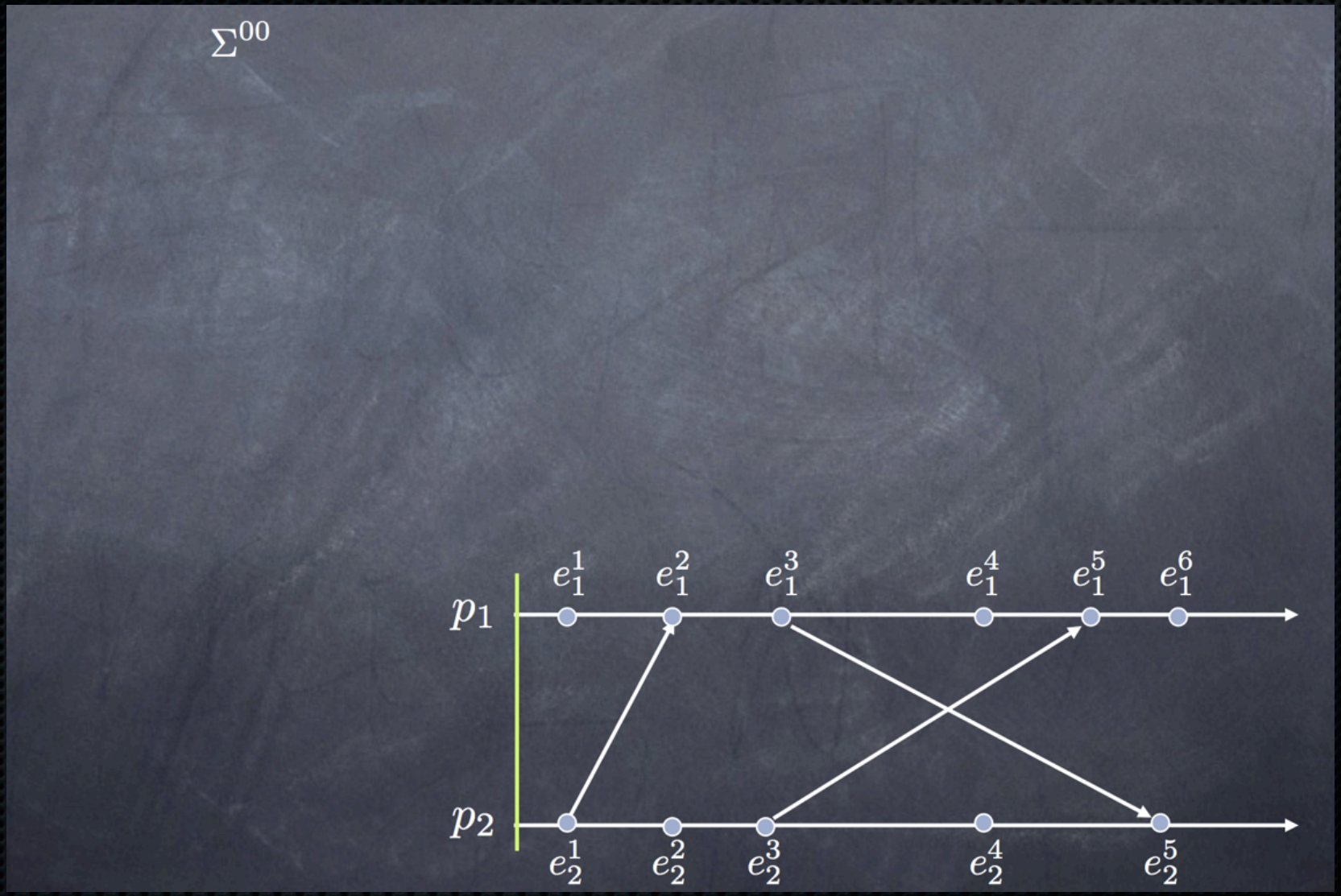

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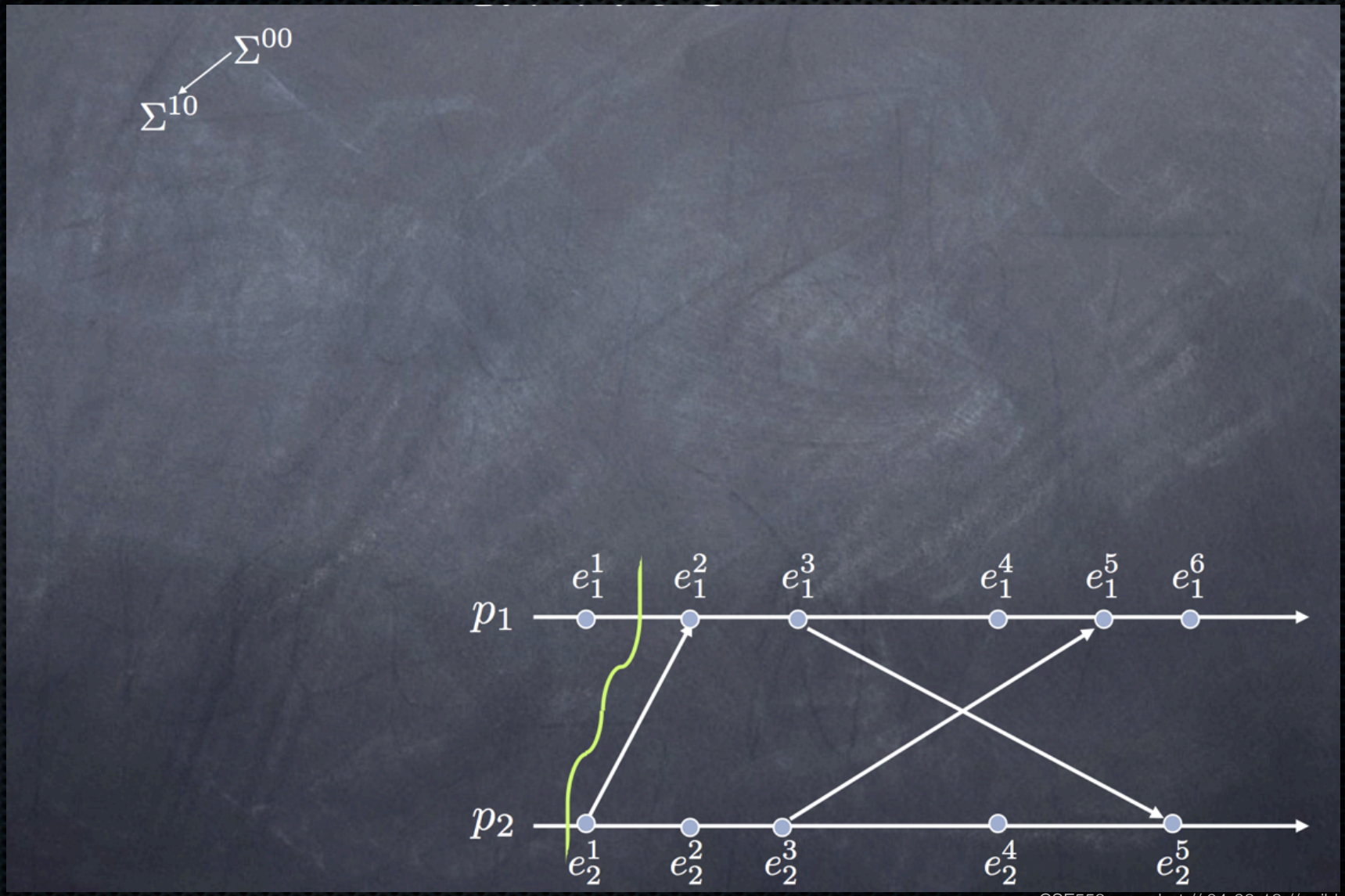

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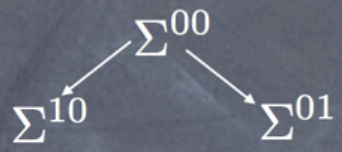

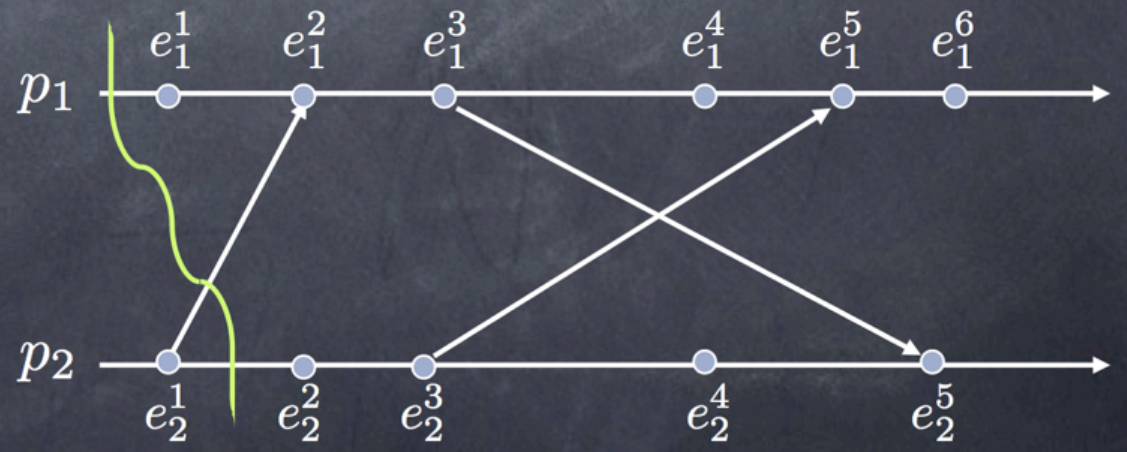

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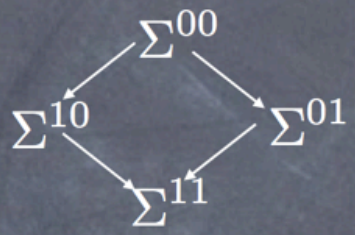

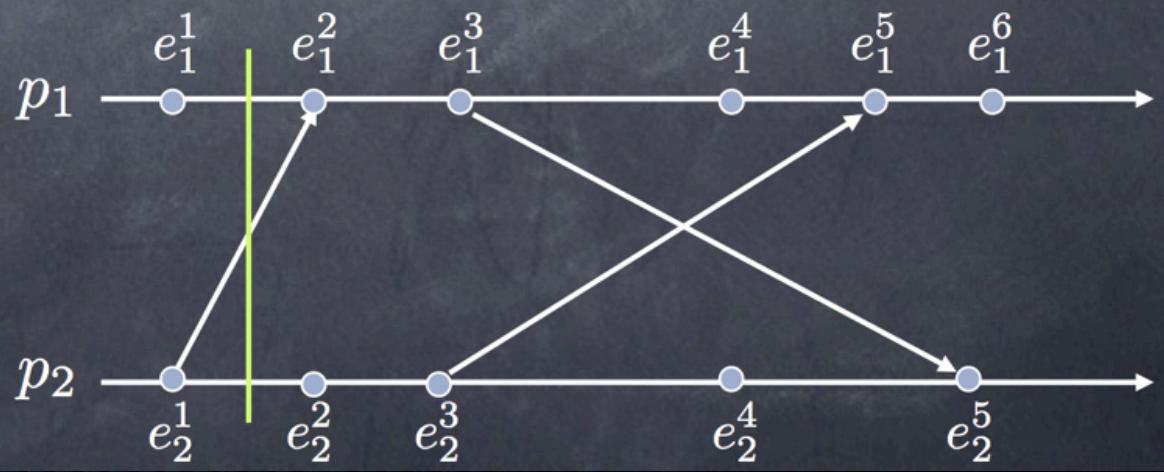

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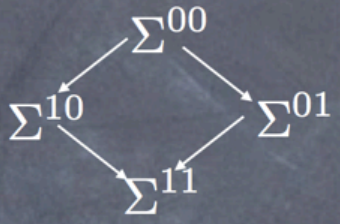

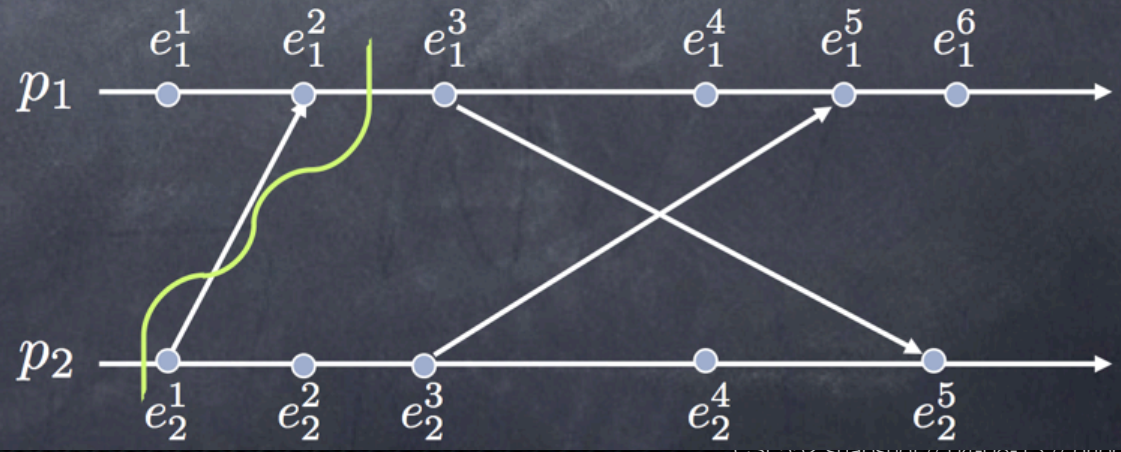

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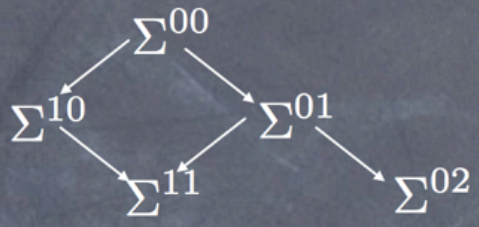

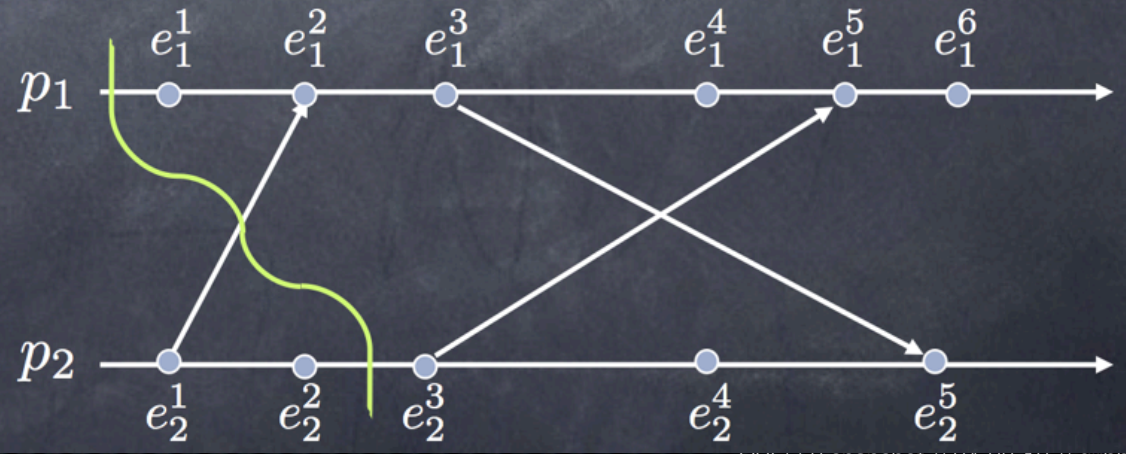

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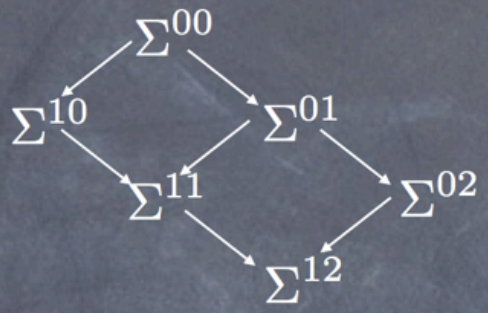

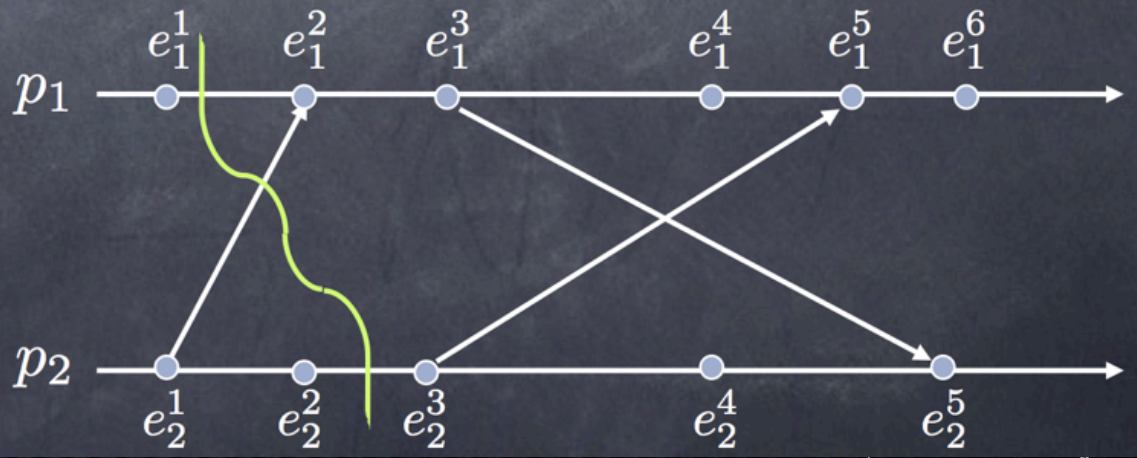

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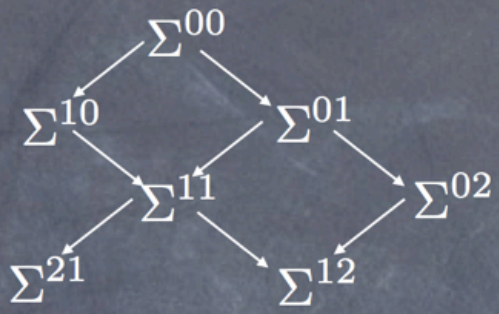

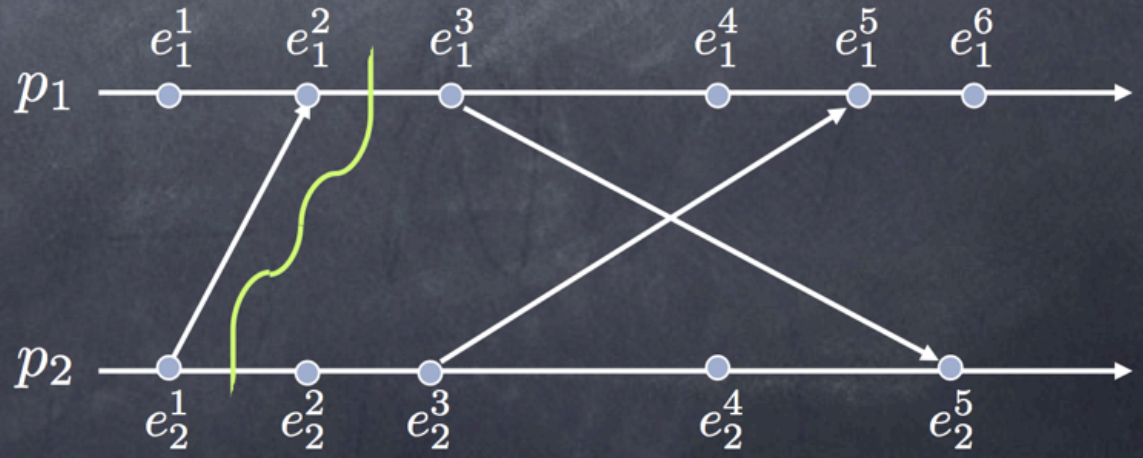

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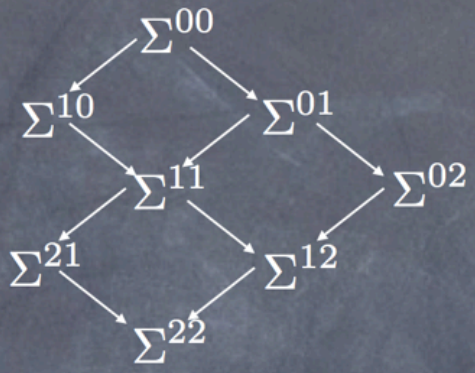

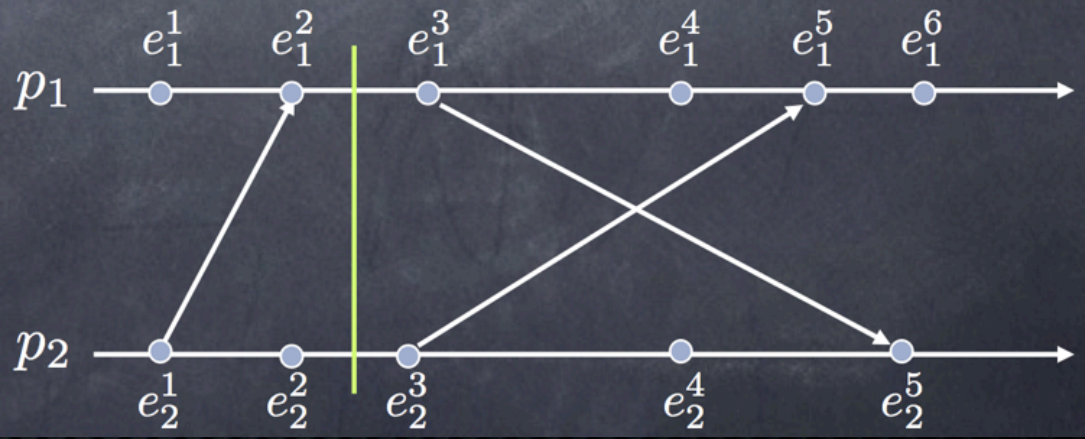

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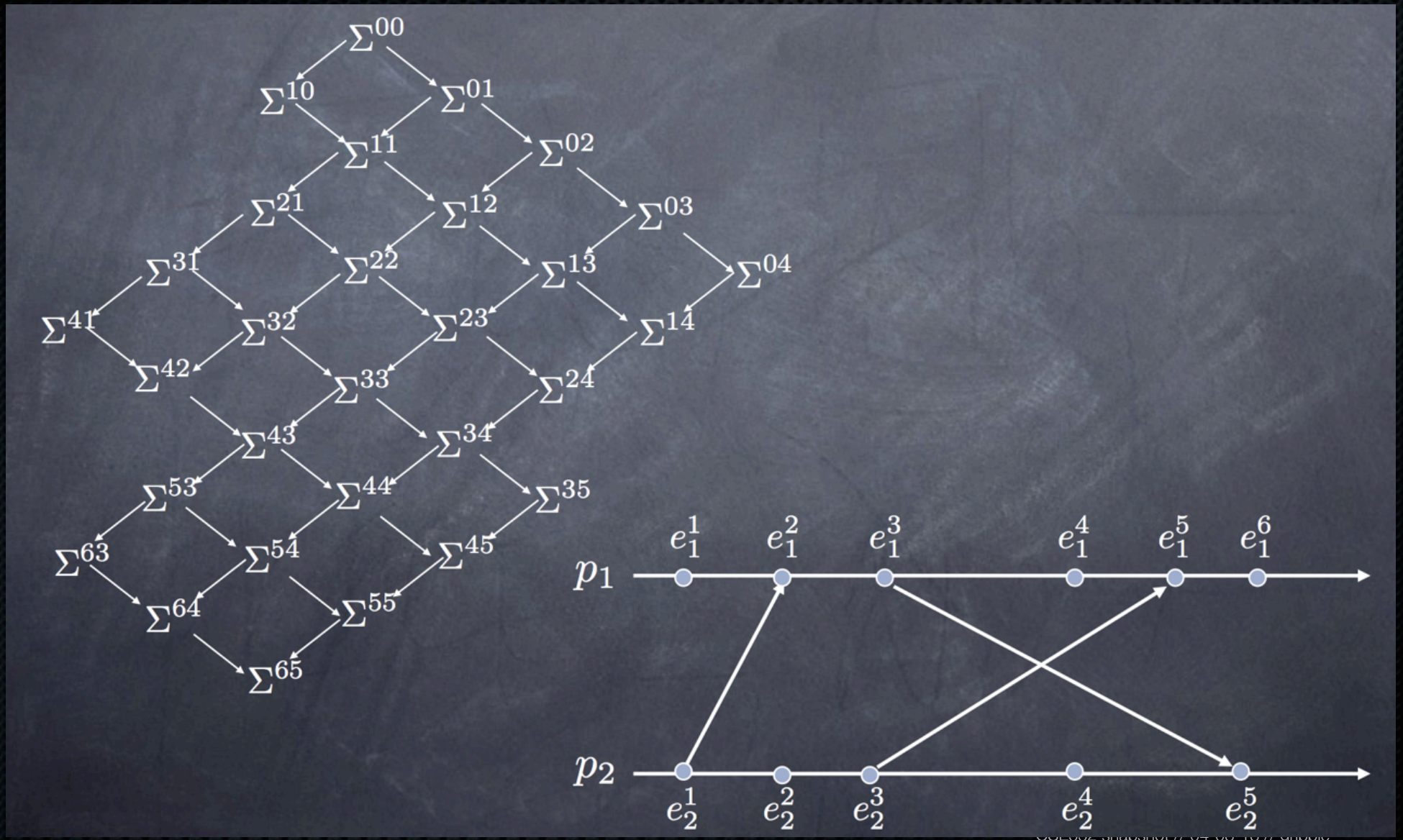
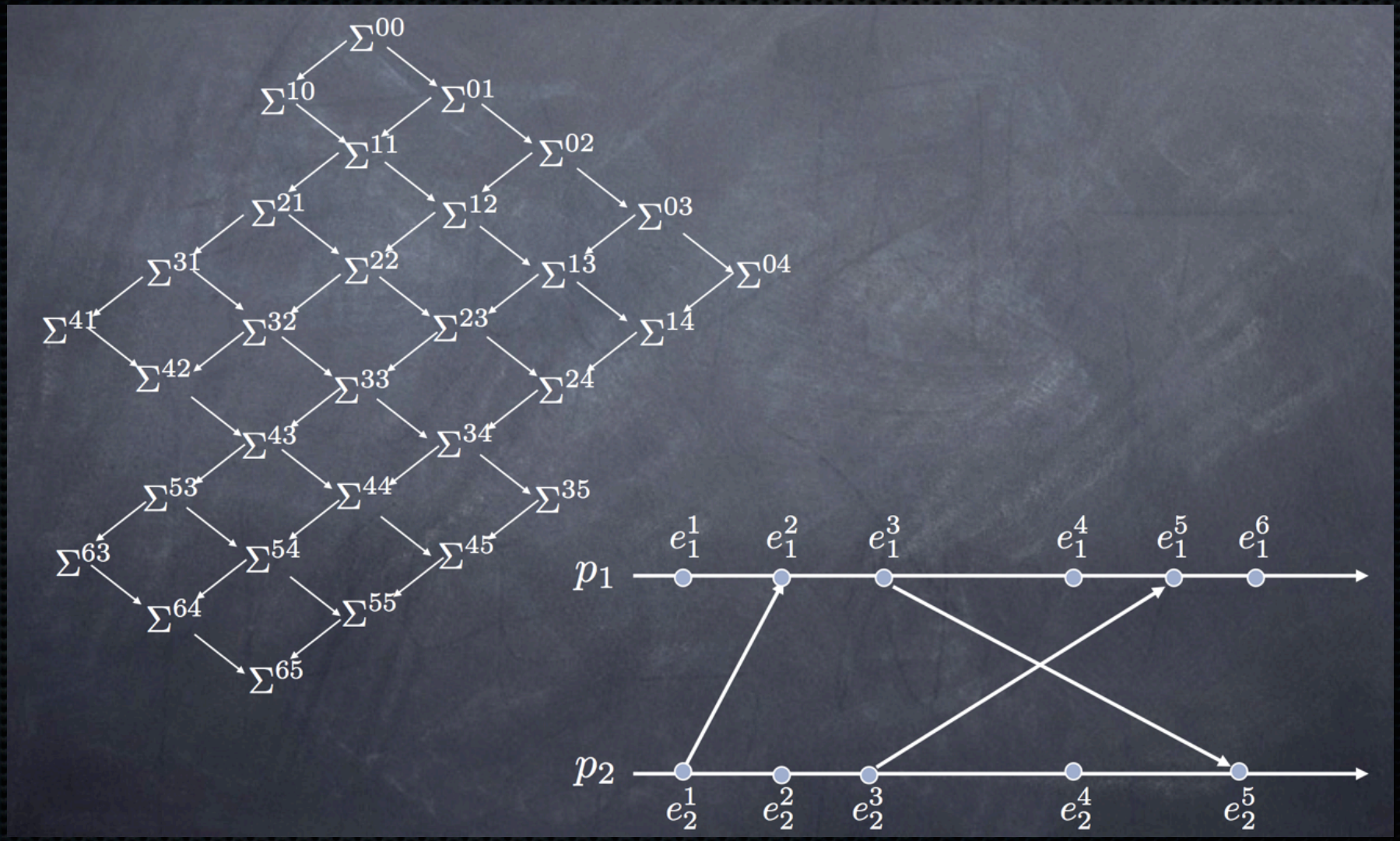


Reachability



Stability

Deadlock is a stable property

- deadlock now means deadlock in future

If a run R of the snapshot protocol starts in Σi and terminates in Σf, then

- Σi leads to Σs leads to Σf
- deadlock in Σs means deadlock in Σf
- no deadlock in Σs means no deadlock in Σi