Ways of Parallelizing SAT/SMT/MC

- Application Level Parallelism
  - multiple Problems (Model+Spec), e.g. SAGE
  - *embarrassingly Parallelism*
- Portfolio / Engine Level Parallelism
  - different Strategies / configurations / algorithms
  - schedule / synergy / sharing
- Algorithmic Parallelism
  - systems: Cloud / Cluster / Multi-Core / GPU
  - e.g. *guiding path*, *cube & conquer* (in SMT/SAT)

Parallelizing SAT/SMT/MC on the Cloud

- Application and Portfolio Level easily possible.
- Control Flow Splitting
  - splitting search space is hard
    - needs to avoid repeating hard sub-problems.
    - how to share learned information?
  - current symbolic algorithms
    - in general memory bound
    - complex control flow
- *Data Flow Oriented Symbolic Algorithms?*
- *Cloud Model Checking as a Service?*
- *Security and Business Model issues?*

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