Parallel Algorithm Selection

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What is **Algorithm Selection**

- **different performances**
- most **suitable** algorithm from an **algorithm portfolio**

Parallel Algorithm selection

- One approach for improving instance-based algorithm selection

- It helps us to use most of our hardware resource

What have we done?

Some parallel tests

- With different number of parallel solvers
- On different nodes running on Teton cluster of uwyo

RESULTS

Test set: {5,9,12,18,36,72,144}

Node: **KNL** (72 cores)

Solver: **Cadical**

There is a significant increase in runtime of parallel processes when number of parallel solvers becomes more than number of Node's core!

Reasons:
 - Shared resources such as memory
 - Cache collision