



Hierarchical Parallel MIP

(Cynthia Phillips)

- Mixed integer program = optimization problem
 - Resource allocation (e.g. stockpile, sensor network management)
- Solve exactly with intelligent search
- Our PICO solver is **massively scalable**
- Commercial solvers have 100s of man years of **algorithmic smarts**
 - New competition makes these solvers free to academics
- Take the best of both worlds
 - Of course, \exists a few details...

