FAITHFUL AND EFFICIENT SIMULATION OF PARALLEL APPLICATIONS

Tom Cornebize
Advisor: Arnaud Legrand
POLARIS
Supercomputers are complex
Supercomputers are complex
SUPERCOMPUTERS ARE COMPLEX
Supercomputers are complex
SUPERCOMPUTERS ARE COMPLEX
Case in point: performance of DAHU@G5K
Case in point: performance of DAHU@G5K

2018/10
2019/03
WHAT IF WE COULD SIMULATE THE APPLICATION INSTEAD?
What if we could simulate the application instead?

[Graph showing HPL performance (Gflops) vs. Matrix size for Reality and Simulation]

- Matrix size
- HPL performance (Gflops)

Simulation
Reality