

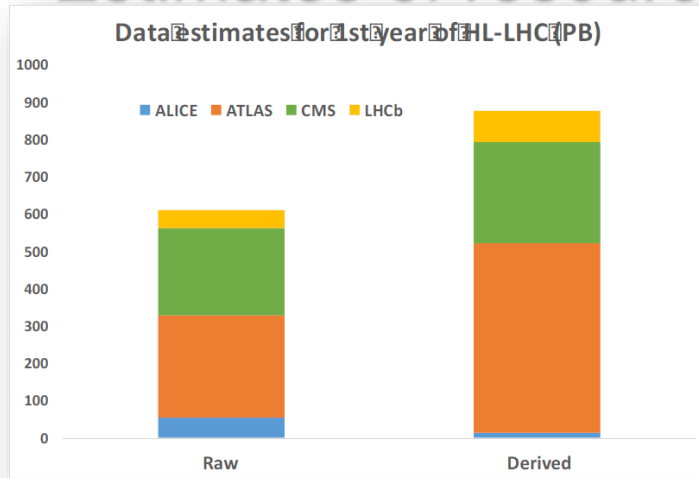
# WLCG Workshop Performance Session

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WLCG Workshop – 9<sup>th</sup> October 2016



# Estimates of resource needs for HL-LHC



## Data:

- Raw 2016: 50 PB → 2027: 600 PB
- Derived (1 copy): 2016: 80 PB → 2027: 900 PB

## CPU:

- x60 from 2016

Technology at ~20%/year will bring x6-10 in 10-11 years

- Simple model based on today's computing models, but with expected HL-LHC operating parameters (pile-up, trigger rates, etc.)
- At least x10 above what is realistic to expect from technology with reasonably constant cost

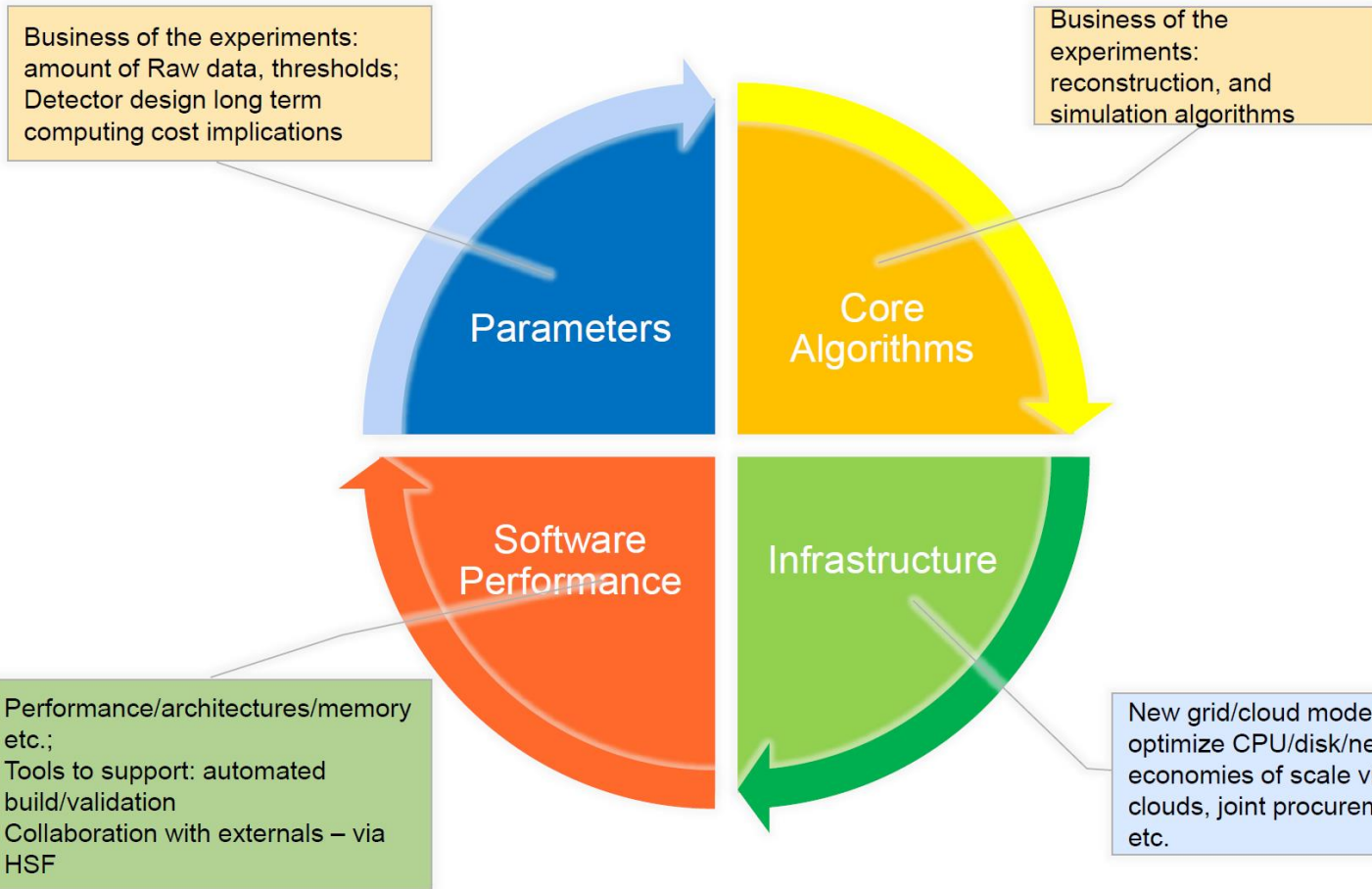


8 October 2016

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# HL-LHC computing cost parameters



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# WLCG Workshop Performance Session

- Focus on reducing the cost of CPU/compute
  - Software optimizations
  - Workflow optimizations
  - Choices about physics and algorithms are business of the experiments
- Presentations in this session
  - Experiment-specific activities
  - Infrastructure-specific and common activities