Speed, Heat, and Noise
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In order to address how particular applications will execute on future architectures, we will need to model user defined noise patterns. This work will demonstrate the feasibility of a scalable noise model and simulation targeted for exascale machines.

5 Trials → distribution of varying critical path lengths, critical path jumps between ranks

Accomplishments
• load balanced synthetic Jacobi benchmark
• PMPI noise measurement and noise injector
• Noise simulator and replay engine built in R

Current Status
• Validating simulator with replay engine

Goal
• Allow simulation of noise for proposed exascale architectures

Noise Variation by Rank

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