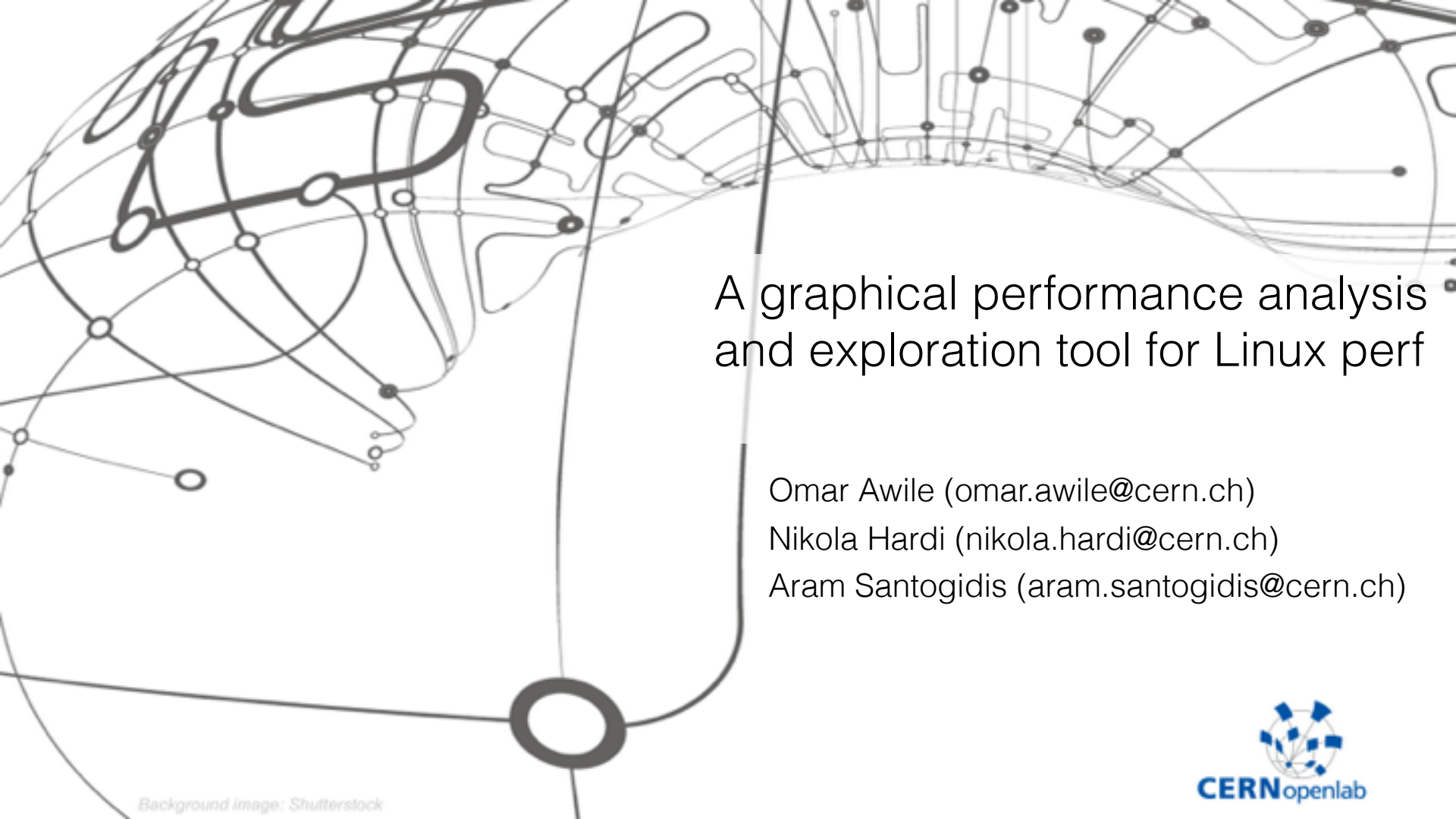

A graphical performance analysis and exploration tool for Linux perf

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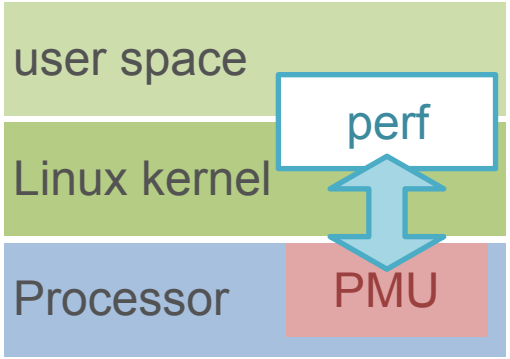
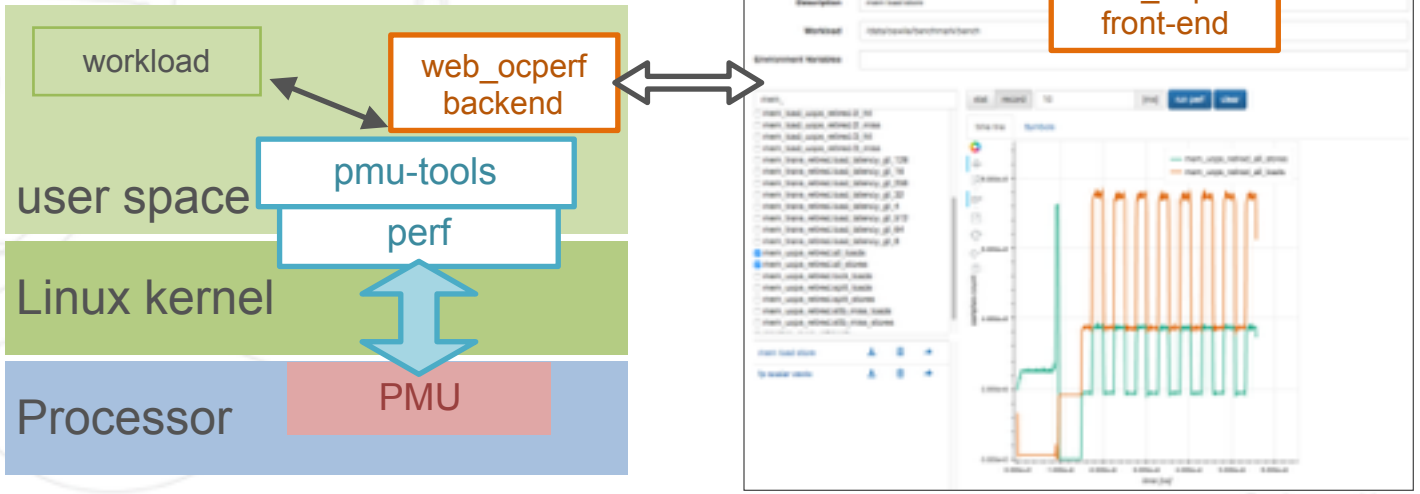
PMUs and Linux perf

- Performance Monitoring Units (PMUs) allow measuring the performance of a workload with minimal overhead
  - The hardware can count and report events during workload execution
- Linux can probe the processor's PMUs and provides a user interface to setting up, performing and analyzing measurements through perf.



A simpler interface

- We built on top of Linux perf and pmu-tools (a toolkit that improves perf's usability) a web-based graphical interface.
- We use modern web technologies and visualization libraries to allow for an easy setup of performance benchmarks and analysis of the results



Status - Future work

- The current interface offers all basic features
  - Running perf stat and perf record with a desired workload
  - extended event names are provided through ocperf and can be easily chosen from a list
  - Samples are plotted using Bokeh both in a timeline view and aggregate bar plot over symbols
  - Session management allows grouping, naming, exporting, sharing and deleting benchmarks
- More work is needed to make the code more stable and better handle special cases
  - Multi-plots and axis transformations would improve visualization
  - Realtime feedback from the workload