



09/10/2023

Ore 15:00

Aula Consiliare Dipartimento di Fisica, Cittadella Universitaria di
Monserrato

Seminar

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Performance Optimization for GPUs with the Nsight Profiling Tools

Porting and optimizing applications for GPUs is an iterative process, and a key part of that is using profiling tools to understand where to focus the effort. We will learn how Nsight Systems gives us the necessary global overview of the application timeline, effectively utilizing the available data, traces and the auxiliary NVTX library to pinpoint bottlenecks. Where necessary, we will look at how to dive deeper into individual kernel optimization with Nsight Compute.

Combined with practical examples of using these advanced measurement tools, our goal is to understand the fundamental limiters of performance and let this understanding guide the implementer's next steps.