



Center for Fundamentals
of Subsurface Flow



SCHOOL OF ENERGY RESOURCES

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FRIDAY
April 19th
12:10-1:00pm

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Energy
Innovation
Center

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Encana
Auditorium
Rm. 201

•
Lunch
provided

In Situ Analysis with ParaView Catalyst

High performance computing moves towards exascale where the "FLOPS are free" and data movement is the primary bottleneck. The current simulation approach, which relies extensive on I/O resources, simply does not or will not scale. To deliver useful information to the scientist, engineer and/or medical researcher, it is clear that we must manage data movement, perform analysis in situ, and leverage advanced analysis algorithms. In this talk, I describe ParaView Catalyst, a framework for in situ analysis. By tightly coupling a simulator with ParaView Catalyst, we circumvent the bottlenecks associated with the cycle of storing and retrieving data for analysis to and from disk. I describe this coupling demonstrating how in situ visualization and analysis pipelines can be nimbly implemented.

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