mathrocks: Multiscale inversion of porous rock physics using high performance simulators: bridging the gap between mathematics and geophysics
JOSEP DE LA PUENTE
Big data applications processing extreme amounts of complex data are nowadays being integrated with even more challenging requirements such as the need of continuously processing vast amount of information in real-time. Current data analytics systems are usually designed following two conflicting priorities to provide:

(i) a quick and reactive response...

MED-GOLD: Turning climate-related information into added value for traditional MEDiterranean Grape.
OLive
NUBE GONZALEZ
LEGaTO: Low Energy Toolset for Heterogeneous Computing
OSMAN UNSAL
Recently system integrators have dramatically increased their efforts in heterogeneous computing by integrating heterogeneous cores on die (ARM), utilizing general purpose GPUs (NVIDIA), combining CPUs and GPUs on same die (Intel, AMD), leveraging FPGAs (Altera, Xilinx), integrating CPUs with FPGAs (Xilinx), and coupling FPGAs and CPUs in the same package (IBM-Altera,...

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MARC CASAS
The Mont-Blanc 2020 (MB2020) project ambitions to initiate the development of a future low-power European processor for Exascale. MB2020 lays the foundation for a European consortium aiming at delivering a processor with great energy efficiency for HPC and server workloads. A first generation product is scheduled in the 2020 time frame. Our target is to reach exascale-level...

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EUCP: European Climate Prediction system
FRANCISCO J DOBLAS REYES

The European Climate Prediction system project (EUCP) has four objectives, all directly relevant to the work programme, and fully meet the challenge, scope and impact of the work programme.

1. Develop an innovative ensemble climate prediction system based on high-resolution climate models for Europe for the near-term (~1-40 years), including improved methods used to characterise...

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ALBERT SORET
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