mathrocks: Multiscale inversion of porous rock physics using high performance simulators: bridging the gap between mathematics and geophysics
JOSEP DE LA PUENTE
[KEYWORDS][ABSTRACT]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...

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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
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ALBERT SORET

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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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