Fabio Schifano

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Talk Title: Reconfigurable Computers

Sebastiano Fabio Schifano has Laurea in computer science from the University of Pisa (Italy). He has been associate research first at Italian Research Council (CNR) and then at Italian Institute for Nuclear Physics (INFN) for seven years. At INFN he was mainly involved in the development of the European project APE, to design high-performance massively parallel systems optimized for LQCD applications. Within the activities of the APE project he has contributed to the definition of the architecture of the processor and of the system, and he coordinated the development of the code-optimizer (shaker), and of the operating system.

More recently he has been involved in the development of the Spanish-Italian Janus system, a heterogeneous massively parallel system based on FPGA. Janus has been developed mainly as spin-glass simulation engine, but it can be easily reconfigured for others applications.

Currently he is research associate of computer science at University of Ferrara in Italy, and he is involved in European projects to develop parallel machines for scientific applications based on commodity processors interconnected by a 3D-mesh custom network, derived from the experience of the APE project. Schifano has published 20+ papers and supervised approximately 10 computer science thesis.

Currently he is mainly focused on research for the development and optimization of scientific programs for the Cell-BE processor, and development of a network-processor to interconnect commodity CPUs through a 3D torus grid.