Prof. Veljko Milutinović,

received his PhD from the University of Belgrade, spent about a decade on various faculty positions in USA (mostly at Purdue University), was a codesigner of the DARPAs first GaAs RISC microprocessor, now teaching and conducting research at the University of Belgrade, mostly in dataflow computing, with a stress on simulations; his interests also include earthquake simulations of brick and mortar structures. He has about 2400 google scholar citations.

Naslov predavanja: DataFlow SuperComputing

This presentation analyses the essence of DataFlow SuperComputing, defines its advantages and sheds light on the related programming model.

DataFlow computers, compared to ControlFlow computers, offer speedups of 20 to 200 (even 2000 for some applications), power reductions of about 20, and size reductions of also about 20.

However, the programming paradigm is different.

The later part of the talk explains the paradigm, using Maxeler as an example (Maxeler is 20% owned by JPMorgan), and sheds light on the ongoing research in the field.

Examples include GeoPhysics, CivilEngineering, DataMining, etc.