

# The 6th International Conference "Distributed Computing and Grid-technologies in Science and Education"



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## **Solving large scale optimization problems on desktop grids and combined distributed infrastructures**

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Many global optimization problems need huge computational resources for their resolution thus making use of HPC resources inevitable. In the talk we give a brief overview of existing approaches to parallelization of global optimization algorithms. Then we explain why traditional approaches well tested on multicore servers and computational clusters fail for such complex systems as desktop grids and combined distributed computational infrastructures. We conclude with the outline of existing technologies and best practices of using such type of resources in numerical global optimization.

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