

PyCOMPSs

(Workshop)

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Abstract: *PyCOMPSs is a task-based programming model developed by the BSC that enables the parallel execution of sequential Python applications in distributed computing platforms. PyCOMPSs can be used to parallelize applications written entirely in Python, and also for the development of workflows that involve calls to external binaries (including MPI ones). The dislib is a machine learning library parallelized with PyCOMPSs that follows the scikit-learn syntax. The tutorial will focus in the use of PyCOMPSs in the RES supercomputers through examples, including a hands-on in MareNostrum 4. One of the exercises will be based in the dislib.*

Bio: He holds a PhD on Advanced Computer Technologies (2014) from the University of Castilla-La Mancha (UCLM), Spain. During his PhD, he was awarded by the Ministry of Economy and Competitiveness (MINECO) of the Spanish Government with a FPI fellowship grant. Previously, he worked at CERN for one year (2009) into WLCG software development and management. Since 2015, he is leading the efforts on the PyCOMPSs binding at BSC. In 2016 he was awarded by the MINECO with the Juan de la Cierva grant. His current research interest are QoS, development paradigms, parallel and distributed computation, HPC and Cloud computing. He is currently participating in the NEXTGenIO EU funded project.