

## DPJ: JAVA CLASS LIBRARY FOR DEVELOPMENT OF DATA-PARALLEL PROGRAMS

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### *Abstract*

Problem of Java language usage of data-parallel programs using the SPMD model of parallel execution is discussed in the paper. The sequential components of parallel program are executed in parallel on distinct JavaVMs running on processors of the parallel computer. Links between the parallel program components are carried out by means of the standard message passing interface package MPI. Parallel extension of Java is made by means of Java itself, namely by DPJ class library, containing the set of Java classes and interfaces. Description of the DPJ library is a main subject of this paper. The scope of the paper is restricted to implementation of the DPJ library for set of JavaVM .