Task scheduling in operating system area is a well-known problem on traditional system architectures (NUMA, SMP). Unfortunately, it does not perform well on emerging many-core architectures, especially on Intel Xeon Phi. We collected all publicly available information about the architecture of Xeon Phi. After that, we benchmarked the Xeon Phi in order to find the missing information about its architecture. We focused especially on the information about cores and memory controllers. These are the most important parts when designing a scheduler. Based on the results, we proposed improvements for scheduling algorithm in the Bobox (an experimental streaming system). However, we found that the biggest problem is not in the scheduling algorithm, but in the design of operators' parallelization. Therefore, we proposed improvements to the parallelization and tested one of the proposals.