

Speeding up the Pulsar search pipeline

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The SMART Pulsar survey produced Petabytes of data, only a small fraction of which has been processed for Pulsar search. Processing was done with a coarse dedispersion plan and using a simple periodicity search. An improvement in the software is required to search a larger fraction of the dataset and to conduct fine searches. We share our contributions to the GPU based implementations of these two algorithms and compare them with the commonly used PRESTO library which uses only OpenMP/MPI parallelism.

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