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My results for given input file:

```
Picture 0: found Object 1 in Position(100,200)
Picture 1: No Objects were found
Picture 2: found Object 0 in Position(800,800)
```

Time on VLAB using 2 computers: 2.3 seconds on average.

Algorithm and parallelization structure: (MPI + OpenMP)

Split pictures evenly between the processes (communicate using MPI), remaining pictures are taken care of by the master process. (static pool approach)

Then for each process:

For each picture in the process's designated pictures:

Go over ALL the objects, sequentially and for each object go over the possible match indexes (dim(pic)– dim(obj)) in parallel (using openMP).

For Each possible index, call the matching function and compute it using openMP parallel for add reduction.

Send results back to master using MPI gather, then master writes all the results into the output.

Complexity : O(#pic/#proc * sum(dim(pic) – dim(obj) for each obj) / #threads)