One of the most significant innovation of C++17 was the introduction of the parallel STL library.

With this library, programmers may use many generic libraries concurrently without concering the implementation details of platform specific parallel implementation. However, some of the STL algorithms are hard to apply with this new paradigm.

As an example, stateful functors like the one we usually use for std::find\_if or std::copy\_if cannot be applied parallely on different ranges and then simply summarize (fold) their results.

In this thesis, we investigate which algorithms are affected by these kind of problems, furthermore design and implement a prototype supporting library to simplify the problem for programmers.

We implement this library following the current language standards and show their advantages over the current solution by examples.