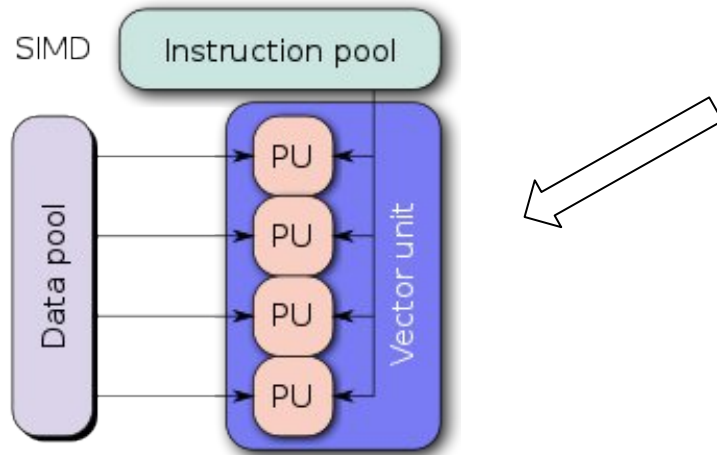


Semesterarbeit/Masterarbeit

Explicit Vectorization of a scientific computing C++ Library



Objects of Interest:

Vectorization the computing intensive functions in the scientific computing library SPHinXsys using Single Instruction/Multiple Data (SIMD) technique.

??? **Main Question:** How can we accelerate a scalar code using SIMD? Is the explicit vectorization library Xsimd and operator overloading good for it?



What subjects you should have passed:
C++ programming, parallel computing, vectorization.

♥ Where is the fun?
On hands work, enjoying the feeling of ultimate acceleration!