

High Programming Productivity for Accelerators

```
#pragma oss task device(open  
#pragma acc kernels  
for (int y=ny0; y < nyf; y++) {  
    for (int x=nx0; x < nxf; x++) {  
        for (int z=nz0; z < nzf; z++)  
            ...code...  
        }  
    }  
}
```

Our main goal is to turn upcoming overwhelmingly-heterogeneous exascale supercomputers into manageable platforms for domain application developers.

Summary

We work on programming models (OmpSs, OpenMP, OpenACC, CUDA, OpenCL, SYCL, OneAPI, etc.) and compiling techniques (such as JIT).

Objectives

- Ease application development for accelerated HPC
- Influence standard bodies

Source URL (retrieved on 2 des 2023 - 17:17): <https://www.bsc.es/ca/research-development/research-areas/programming-models/high-programming-productivity-accelerators>