

[Inici](#) > SORS: Yet Another Stencil Kernel (YASK): scaling-out HPC optimization for Intel® Xeon® and Xeon Phi? processors

---

## SORS: Yet Another Stencil Kernel (YASK): scaling-out HPC optimization for Intel® Xeon® and Xeon Phi? processors

### Objectives

[To see the presentation please click here](#)

**Abstract:** Stencil computation is an important class of algorithms used in a large variety of scientific-simulation applications, especially those arising from finite-difference solutions of differential equations representing the behavior of physical phenomenon such as heat dispersion or seismic activity. This talk provides a brief review of stencil computation and Intel® Xeon® and Xeon Phi™ processors, and it describes the YASK (Yet Another Stencil Kernel) framework that simplifies the tasks of defining stencil functions, generating high-performance code targeted for various Intel platforms, and running tuning experiments. A couple of example YASK features are explained, performance results are given, and future work is described.



**Short Bio:** Chuck Yount received

his PhD degree in ECE from Carnegie Mellon University in Pittsburgh, Pennsylvania, USA. He is currently a Principal Engineer in the Software and Services Group at Intel Corporation. His work includes developing

analysis and optimization techniques for HPC applications on many-core products including the YASK open-source software framework for stencil-code optimization.



Barcelona Supercomputing Center - Centro Nacional de Supercomputación

---

**Source URL (retrieved on 19 abr 2024 - 08:21):** <https://www.bsc.es/ca/research-and-development/research-seminars/sors-yet-another-stencil-kernel-yask-scaling-out-hpc-optimization-intel%C2%AE-xeon%C2%AE-and-xeon-phi%E2%84%A2>