

Introduction

Christopher Jones, Kyle Knoepfel, Attila Krasznahorkay



HSF/WLCG Virtual Workshop



HSF WLCG Virtual Workshop on New Architectures, Portability, and Sustainability

11-13 May 2020
Zoom
Europe/Zurich timezone

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The HSF and WLCG have organised this virtual event to focus on the challenges and opportunities of new computing architectures. This is a critical and highly relevant topic for HEP where much progress is being made, but there remain many open questions to discuss.

Adapting to the needs of the community to host more *virtual participation events* we will hold this meeting over 3 days, from 16-18h each day, to maximise the opportunity to participate.

Three themes will be addressed across the three days:

- Application Software
- Processing Frameworks
- Validation and Accounting

Overview

Timetable

Virtual Meeting Guide

Registration

Participant List

Contact

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- Still trying to find the right way to use our 1 hour slot at the workshop...
 - We were thinking of giving just one overview/summary talk about what we've heard in these meetings over the last months, and discussing mostly about multi-threaded execution topics afterwards
- If people have strong feelings for going another route, let us know 😊

tbb::task Deprecation



- We (I) learned just last week that Intel is deprecating the [tbb::task](#) API
 - The reason is that they want to provide “higher level” APIs in [TBB](#) for the users instead, which would allow them to do optimisations behind the scenes more freely
- In HEP, especially at the LHC, we use [tbb::task](#) **very** extensively
 - We were discussing both in ATLAS and CMS internally about this situation in the last 2 weeks
- While each experiment may see the severity of this change differently, it does require some serious discussions
 - The choice of TBB as the multi-threading platform for HEP came from the idea that as long as “everybody” uses TBB, tools/frameworks will be able to nicely share CPU resources when running together.
 - We should not allow everybody to start migrating to different backends in an unorganised way
 - Graeme started organising a dedicated discussion on this topic, which should happen soon
 - At this point we’re still at the “Doodle poll” stage 😊

16:00 → 16:10 **Introduction**

🕒 10m

Short introduction to the meeting, overview of things to come in the working group.


Speakers: Attila Krasznahorkay (CERN), Christopher Jones (Fermi National Accelerator Lab. (US)), Kyle Knoepfel (Fermi National Accelerator Laboratory)

16:10 → 16:30 **Multi-Threading in CMSSW**

🕒 20m

A description of how multi-threading is achieved using TBB in CMSSW (<https://cms-sw.github.io/>).

Speaker: Christopher Jones (Fermi National Accelerator Lab. (US))

 HSF Framework WG...



<http://home.cern>