IWOCL

INTERNATIONAL WORKSHOP ON OPENCL

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UOB
HPC

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IWOCL 2018

- 87 delegates from 13 countries
- 51 different organisations
- 33 submissions, 16 accepted papers
- 7 posters, 3 accepted workshops
  - DHPCC++
  - Programming FPGAs with OpenCL
  - Advanced Hands-On OpenCL

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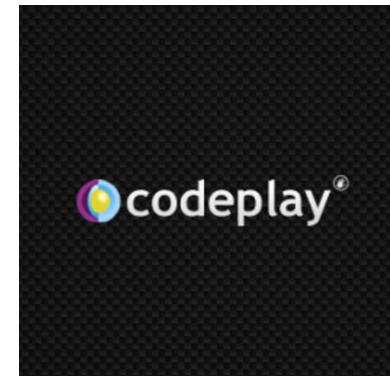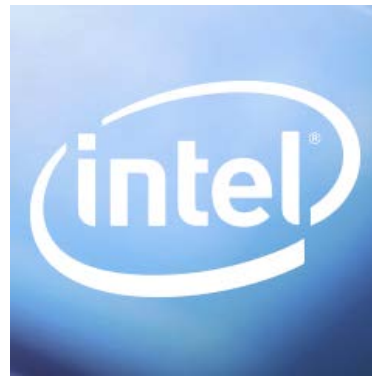
Conference Sponsors

We would like to thank the following companies who have done so much to help make IWOCL 2018 the success that it has been and we look forward to 2019!

Tuesday's Agenda

09:00 – Keynote: Neil Trevett, NVIDIA & Khronos

10:00 – DCompute: Compiling D to SPIR-V …

10:30 – What's New in SYCL 1.2.1

11:00 – Refreshment Break

11:30 – Optimizations for OpenCL on FPGAs

12:00 – Kernel-level Power Estimation on FPGAs

12:30 – Intel FPGA Host Pipe Extension to OpenCL

13:00 – Lunch

14:00 – Keynote: Andrew Richards, Codeplay

14:30 – Nuclear Reactor Simulation on OpenCL FPGA

15:00 – Advantages and Pitfalls of OpenCL in Computational Physics

15:30 – Refreshment Break

16:00 – Khronos Panel Discussion

17:30 – Sessions Close

19:30 – Conference Dinner

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Conference Dinner

- 7:30pm drinks reception, 8:00pm dinner
- St Hilda's College, Cowley Place, Oxford, OX4 1DY
  - About 1 mile, allow 30 minutes to walk from the conference venue.
- Vegetarian? See Tim at registration desk
- Directions: https://www.iwocl.org/iwocl-2018/venue-and-travel/

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Wednesday's Agenda

09:00 – Invited speaker: Jeff Lait, SideFX

09:30 – OpenCL Optimization and Best Practices for Qualcomm Adreno GPUs

10:00 – TensorFlow Acceleration on ARM Hikey Board

10:30 – CLBlast: A Tuned OpenCL BLAS Library

11:00 – Refreshment Break

11:30 – MatCL – A New Easy-to-Use OpenCL Toolbox for MathWorks Matlab

12:00 – clARMOR: A Dynamic Buffer Overflow Detector for OpenCL Kernels

12:30 – Improving Performance of OpenCL on Intel Processors via Profiling

13:00 – Lunch

14:00 – Highlighted presentation: Building a Brain with SYCL and Modern C++

14:30 – Debugging and Analyzing Programs Using the Intercept Layer…

15:00 – Enabling Profiling for SYCL Applications

15:30 – Refreshment Break & Open Discussion

17:00 – Sessions Close

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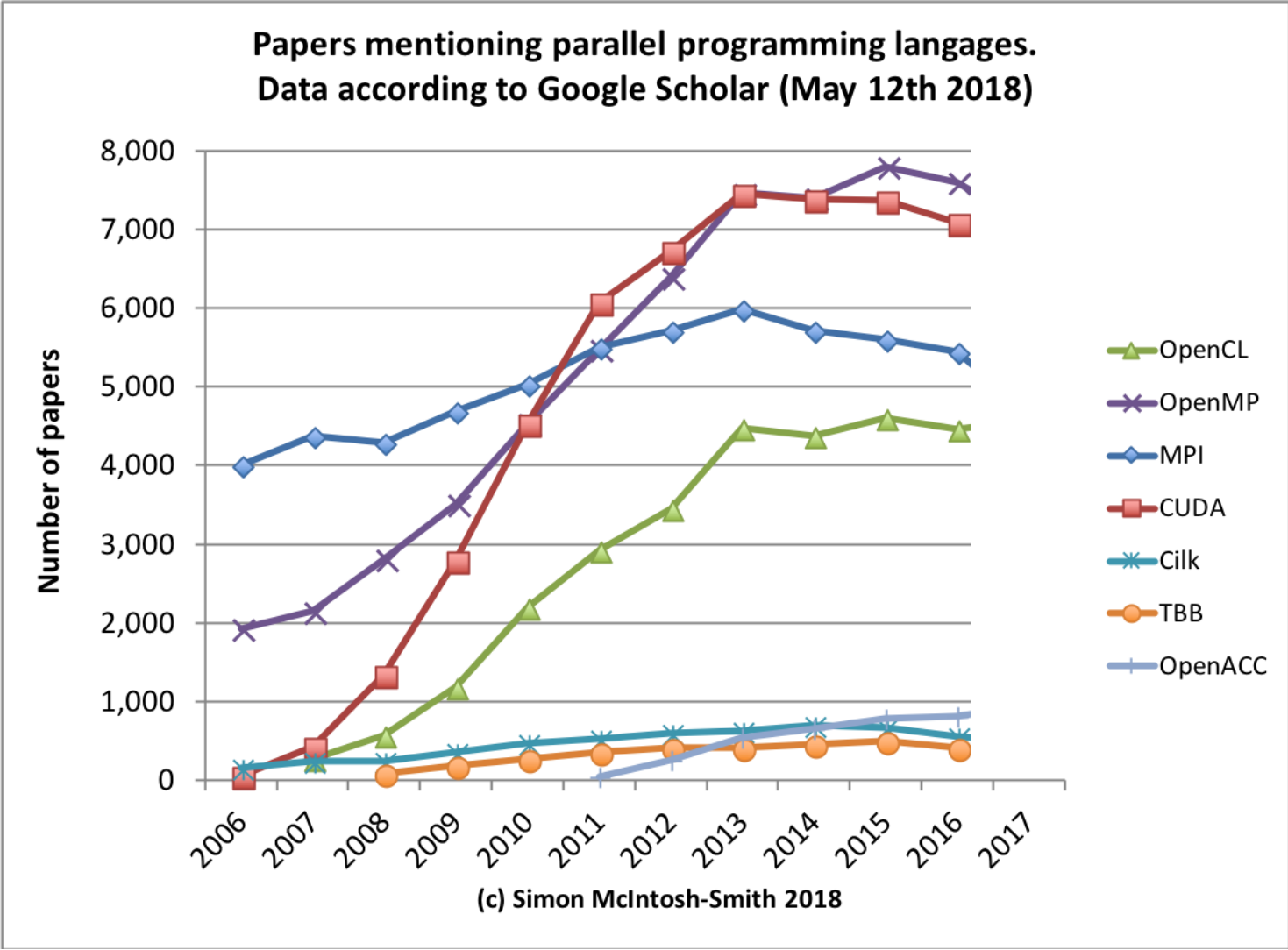
Proceedings

- Slides will be on the website asap
  - Speakers, please email your slides to Tim!
- ACM proceedings already available:
  - https://dl.acm.org/citation.cfm?id=3204919
  - Thanks to Tom Deakin @ UoB & Authors

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IWOCL History

2017 Toronto

2018 Oxford

2014 Bristol

2016 Vienna

2013 Atlanta

2015 Stanford

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Adoption of parallel programming langs.

Papers mentioning parallel programming langages.
Data according to Google Scholar (May 12th 2018)

(c) Simon McIntosh-Smith 2018

Legend: OpenCL, OpenMP, MPI, CUDA, Cilk, TBB, OpenACC

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North America

13-15 May, 2019 (Provisional)

Final words

- Please use social media to promote IWOCL:

    - Twitter hashtag: #IWOCL2018
    - Follow: @IWOCL

- Sign up for regular OpenCL newsletter
    - http://www.iwocl.org/opencl-newsletter/

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See you in 2019 and

THANK YOU FOR COMING