IWOCL

INTERNATIONAL WORKSHOP ON OPENCL

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IWOCL history

Los Alamos
May 2012

Stanford
May 2015

Atlanta
May 2013

Bristol, UK
May 2014

Vienna
May 2016

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IWOCL 2015

- ~100 delegates (40 at IWOCL 2013!)
- Attendees from 14 different countries
- 30 different companies represented
- 7 different academic institutions
- 27 submissions, 19 accepted
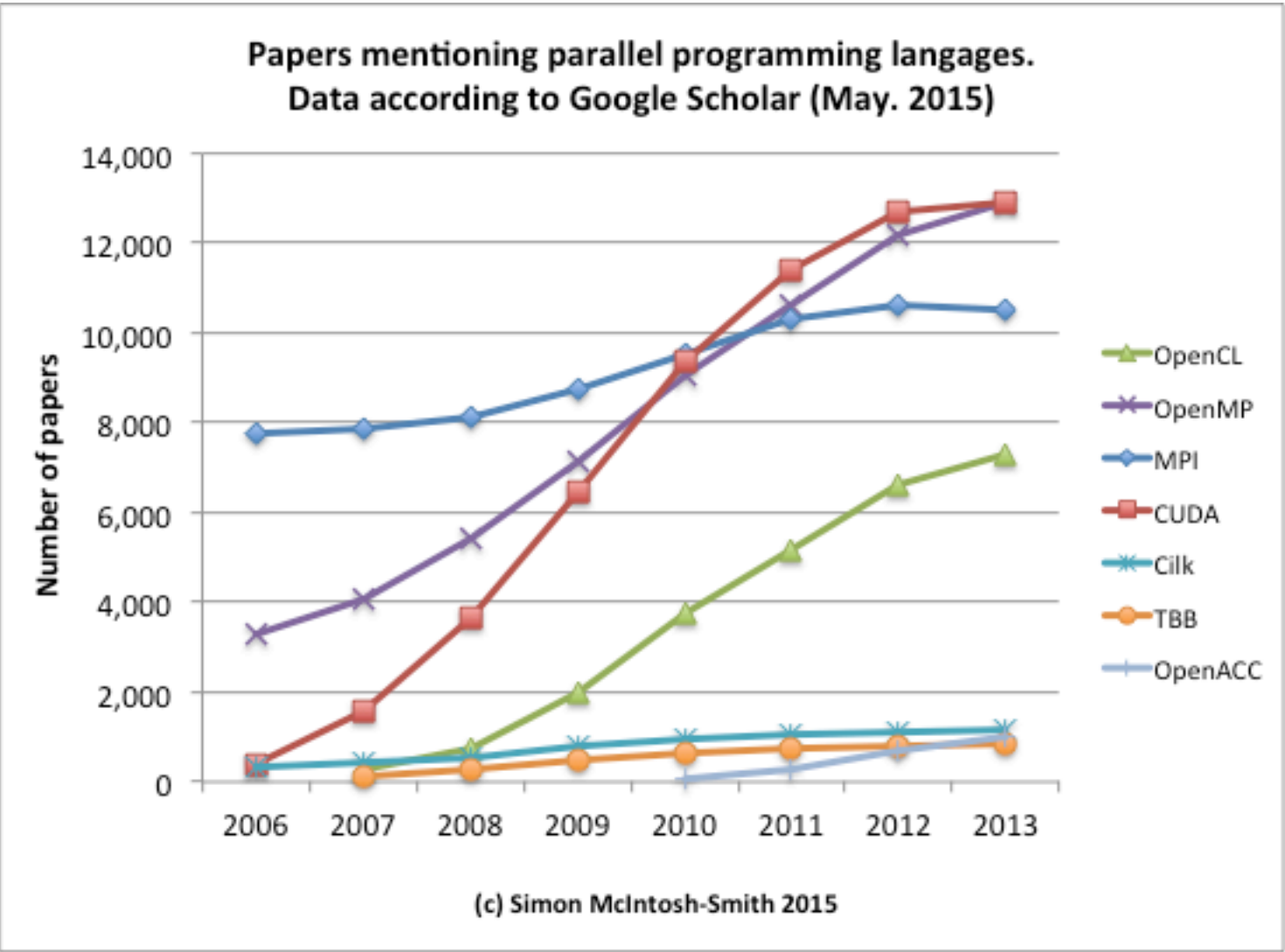- 5 workshops proposed, 4 accepted

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We would like to thank the following companies who have done so much to help make IWOCL 2015 the success that it has been and we look forward to 2016!

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OpenCL momentum building

- More OpenCL implementations released:
  - 2.0 implementations from Intel, AMD
  - OpenCL 2.1 provisional with C++ kernel language
  - 1.2 from Nvidia (hurrah!)
- New Standard Portable Intermediate Representation (SPIR-V) released
- New high-level, single-source programming model, SYCL 1.2, released
- More tutorials online (e.g. HandsOnOpenCL)
- More tools appearing (**Oclgrind**, profilers, debuggers, …)

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OpenCL momentum building

Papers mentioning parallel programming langages.
Data according to Google Scholar (May. 2015)

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Today's Agenda

9:30	Opening Address	*Simon McIntosh-Smith*
	Leveraging OpenCL to Create Differentiation	*Salvatore De Dominicis, Imagination Technologies*
	A Look at the OpenCL 2.0 Execution Model	*Benedict Gaster, University of West of England.*
	Exploring the Features of OpenCL 2.0	*Northeastern University*
	Achieving Performance with OpenCL 2.0 on Intel Processor Graphics	*Michael Stoner. Intel*
11:00-11:30	Morning Coffee Break	
11:30 -	Heterogeneous Computing: the rise of open programming frameworks	*JC Baratault, AMD*
	Mapping C++ AMP to OpenCL / HSA	*Jack Chung, Curtis Davis and Jayram Ramachandran, MulticoreWare.*
	Update on the SYCL for OpenCL Open Standard to Enable C++ Meta Programming	*Andrew Richards, Codeplay*
	Kernel Composition in SYCL	*Univ. Bath, Univ of the West of Scotland and Codeplay*
13:00-14:00	Lunch	
14:00 -	GPU Compute on Snapdragon	*Eric Demers, Qualcomm Inc.*
	Oclgrind: An Extensible OpenCL Device Simulator	*James Price and Simon McIntosh-Smith. University of Bristol*
	Asynchronous OpenCL/MPI numerical simulations of conservation laws	*Univ. Strasbourg, Inria, IRMIA and AxesSim*
	The Great Beyond: Higher Productivity, Parallel Processors and the Extraordinary Search for a Theory of Expression	*Alan Ward. Texas Instruments*
15:30-16:00	Afternoon Break	
16:00 -	CHO: Towards a Benchmark Suite for OpenCL FPGA Accelerators	*Geoffrey Ndu, University of Manchester*
	Performance Optimization for a SHA-1 Cryptographic Workload Expressed in OpenCL for FPGA Execution	*Spenser Gilliland and Fernando Martinez Vallina, Xilinx.*
	IWOCL 2015 wrap and look forward to IWOCL 2016!	*Simon McIntosh-Smith*

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Final words

- Use social media to promote IWOCL
  - Twitter hashtag: #IWOCL
  - Follow: @IWOCL

- The IWOCL Twitter feed will retweet your posts

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

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IWOCL wrap-up – a call to arms!

- Tell your vendors you need OpenCL!
- Come to IWOCL 2016 – Vienna next May
  - Submit a paper, workshop, poster…
  - Be part of the committee
- Sign up for the OpenCL newsletter & Twitter:
  - http://www.iwocl.org/opencl-newsletter/
  - @IWOCL
- Slidesets will appear on the website as soon as we have them
- Formal proceedings will appear shortly afterwards

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IWOCL 2016 – TU Wien, Vienna