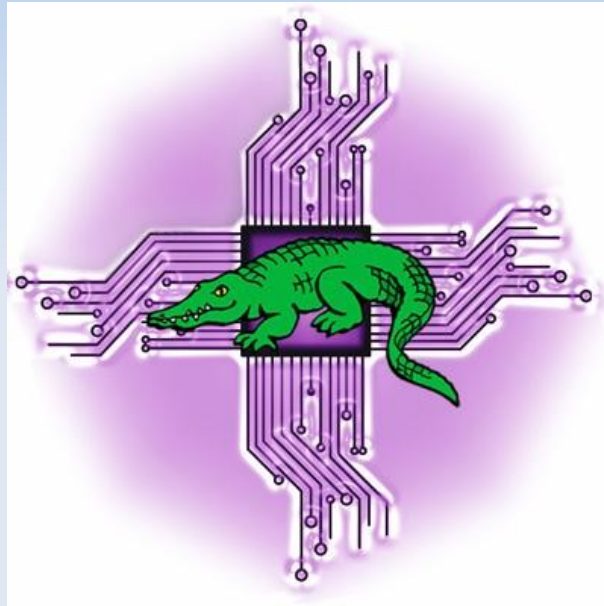


# Multicore World 2017: A Review



**Linux Users of Victoria, March 7, 2017**

lev@levlafayette.com

# About Multicore World

Multicore World is an annual conference in New Zealand organised by Nicolás Erdödy and Open Parallel that has operated since 2012. It started after two very successful miniconferences at Linux Conf AU in 2010 and 2011 (<https://multicorelca.wordpress.com/>)

The conference typically quite small – around 70 participants. But what it lacks in numbers it makes up in speaker quality. e.g.,

Prof. Thomas Sterling

Prof. John Gustafson

Alex St. John

James Reinders

Paul McKenney

Prof. Alexander Szalay

*And some rogue as MC.*



Audience at II Multicore miniconference (LCA2011) in Brisbane, Australia 25 January 2011. In the front row Vint Cerf, Dirk Hohndel and Linus Torvalds listening to Paul McKenney's keynote

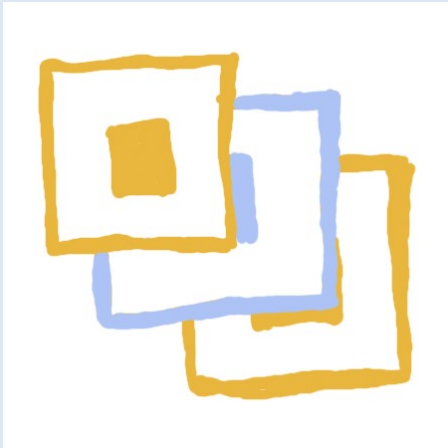
# Multicore World 2017

MCW 2017 held in Wellington, New Zealand, 20-22 February 2017 at 'Shed 6' on the Wellington foreshore, 27 presentations and panels.

Key speakers included: Prof. Satoshi Matsuoka, Prof. Tony Hey, Prof. Michelle Y. Simmons, Happy Sithole, The Honourable Paul Goldsmith, Prof. Andreas Wicenec, John Gustafson, Pete Beckman, Dave Jaggar.

Other speakers of note: Victoria Maclennan, Paul Fenwick

Img: Multicore World logo, GHC Aviation, Seven Events



# Major News and Announcements

Matsuoka reported that Japan has massive plans for developing High Performance Computing especially for the processing of large datasets and artificial intelligence (TSUBAME3.0 supercomputer).

John Gustafson – noting hardware implementation issues with the Unums project, has proposed a variant – posits and valids.

Beckman reported that in August 2016, Chicago became the first city to launch Array of Things a sensing project that air and surface temperature, barometric pressure, light, vibration, carbon monoxide, nitrogen dioxide, sulfur dioxide, ozone and ambient sound intensity. Correlations between these effects and incidence of asthma.

Img: Buzzfeed <https://www.buzzfeed.com/lukelewis/45-earth-shattering-local-news-headlines>



# Square Kilometre Array

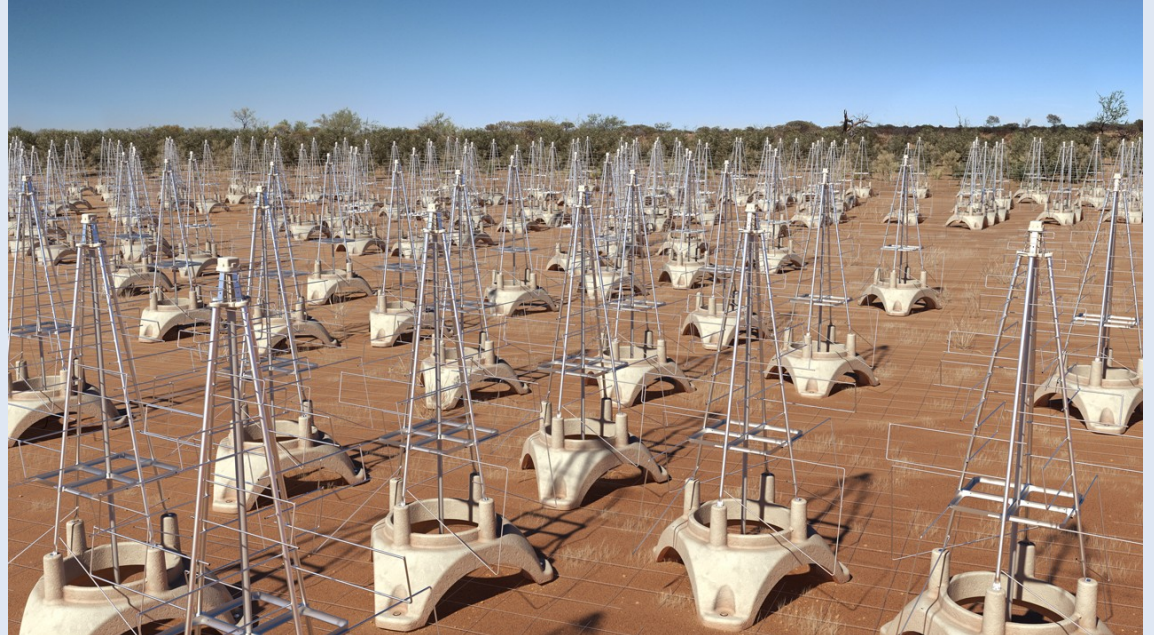
Juan Carlos Guzman spoke on the The ASKAP Science Data Processor system: A Computing precursor of the SKA.

This was followed by three presentations and a panel on the Square Kilometre Array, with the first presentation by Professor Andreas Wicenec on Data Activated 流 (Liu) Graph Engine (DALiuGE), followed by Andrew Ensor on the status of the Square Kilometre Array in New Zealand, and finally Piers Harding on SKA-SDP middleware.

The panel was on funding the SKA.

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Img: from [ska.gov.au](http://ska.gov.au)



# From Nostalgia to the Future

Satoshi Matsuoka presented on real and imagined limits to Moore's Law, noting a 10-15 year limit due to lithography of VLSIs reaching its limits.

Paul McKenney on "Does RCU Really Work?", looked at the issue of bugs in software and their impact,.

Prof Michael J Kelly spoke on the manufacturing challenges for hardware on the device level and its impact on exascale computing.

Dave Jaggard provided a history of the ARM architecture and his role, starting from his work with the Acorn 6502

Img: From the film Casablanca with Humphrey Bogart, Dooley Wilson, and Sydney Greenstreet and Blade Runner.

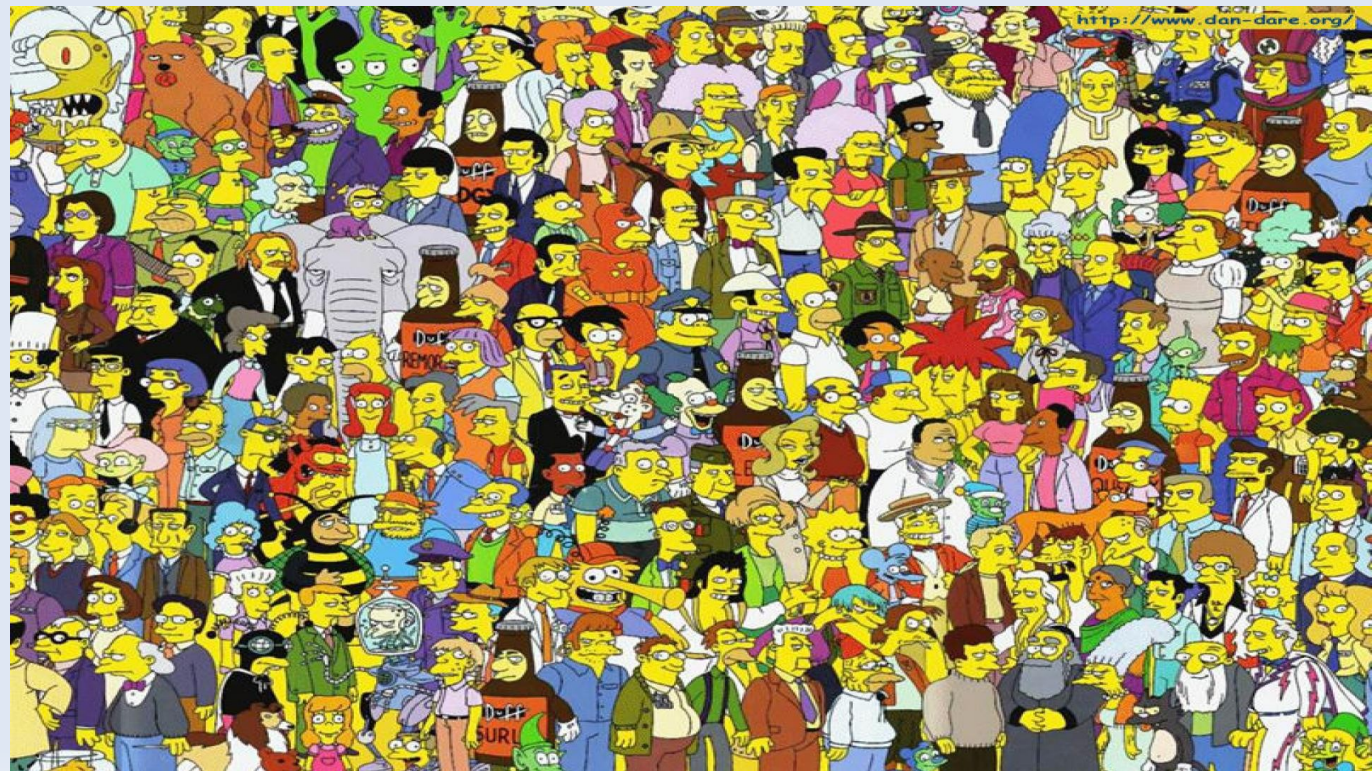


# And Many Others

In addition... Prof. Tony Hey spoke on "The Revolution in Experimental and Observational Science", Prof. Michelle Y. Simmons "The Quantum Revolution: Computing, past, present and future", Lev Lafayette on "HPC/Cloud Hybrids for Efficient Resource Allocation and Throughput", Nathan DeBardeleben on "Supercomputer Resilience", Happy Sithole on "OpenStack for HPC in Africa", Balasz Gerofi on "IHK/McKernel", Ralph Highnam on " Breast imaging analytics"...

Plus panel discussions..

Img: The Simpsons, everyone.



# Observations

Can we have videos please? Last set of available videos are from 2012

<https://vimeo.com/multicoreworld>

Can we have slides please? No available slides from speakers at all.

Can we have an academic stream please? No publication of proceedings, peer review publications etc.

These matters contribute to Multicore World not being as well known as it should be..

Img: <http://knowyourmeme.com/memes/sites/cheezburger>





**THANKS FOR WATCHING**



**& LISTENING PATIENTLY**