

Tuesday, 2nd June

GIRLS IN PHYSICS BREAKFAST



Future Computing and Low Energy Electronics Computing has transformed the world, but there is a price: the huge amount of energy being consumed by massive, factory-sized data centres means that information and communications technology already consumes about 8% of global electricity, and is doubling every decade. At the same time, we are running out of achievable ways to improve the efficiency of existing, silicon-based (CMOS) electronics. Without a 'beyond CMOS' solution, energy will become the limiting factor on further computational growth. Research is being undertaken in various areas of physics and engineering, such as ultra-cold atoms, to combat this problem. However along the way, accidental discoveries are being made in surprising areas, such as cancer research and water filtration.

Dianne Ruka grew up in a small town in rural Victoria. She completed a BSc at the University of Melbourne before working in a genetics lab. She worked as a secondary school teacher, but then returned to research to complete a PhD in Materials Engineering at CSIRO and Monash University. She currently worked at Monash University as the Education & Training Coordinator with FLEET (the ARC Centre of Excellence in Future Low-Energy Electronics Technologies), where she takes research being completed in physics and materials engineering and translates it into educational tasks and demonstrations.

This event is sponsored by Bank Australia, the Laby Foundation, Vicphysics Teachers' Network, the Victorian Branch of the Australian Institute of Physics, FLEET and supported by the Royal Society of Victoria.



Future computing and Low Energy Electronics with Dr Dianne Ruka, Monash University

And ... have breakfast with women with a career in physics or engineering.

'I was talking to a guest at my table and her career sounded so amazing. Then I realised that in 8 years that could be me. I got so excited.'

Then afterwards, two activities on Careers in STEM.

To sign up, see _____

Cost: \$15 Max: Six students

Campus Centre, Monash University

7:30am - 10:00am