

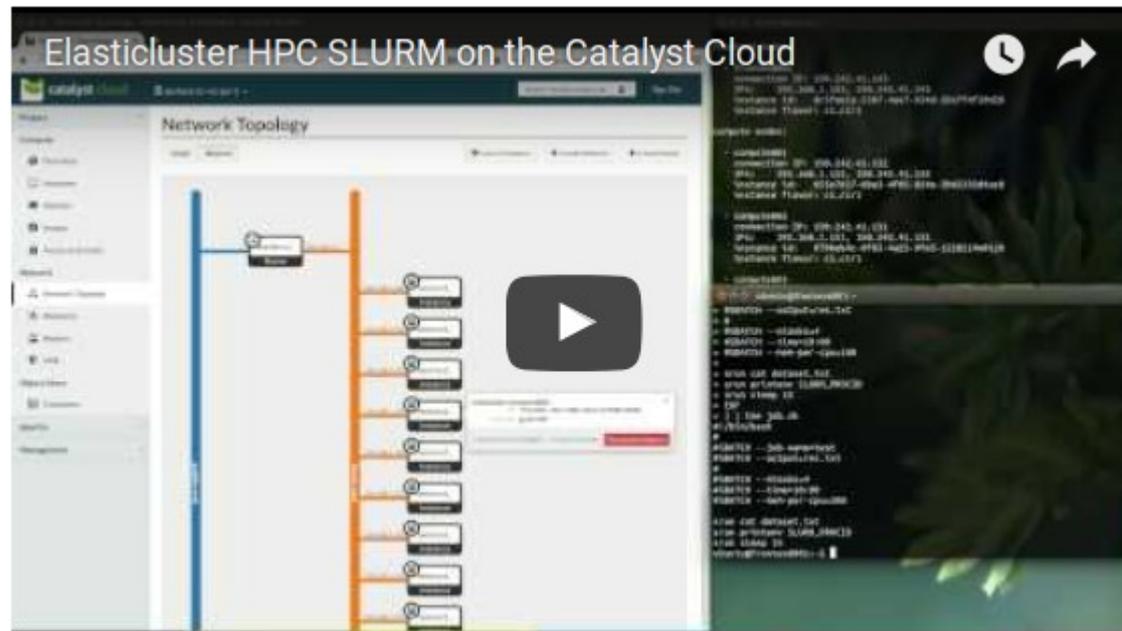
Global collaboration and exchange of research tools

Presented by Bruno Lago, Catalyst IT // 9 February 2016

catalyst 

open source technologists

Global collaboration



<http://docs.catalystcloud.io/tutorials/deploying-a-hpc-slurm-cluster.html>

Portability and reproducibility



Portability and reproducibility



Bare metal



Virtual Machines



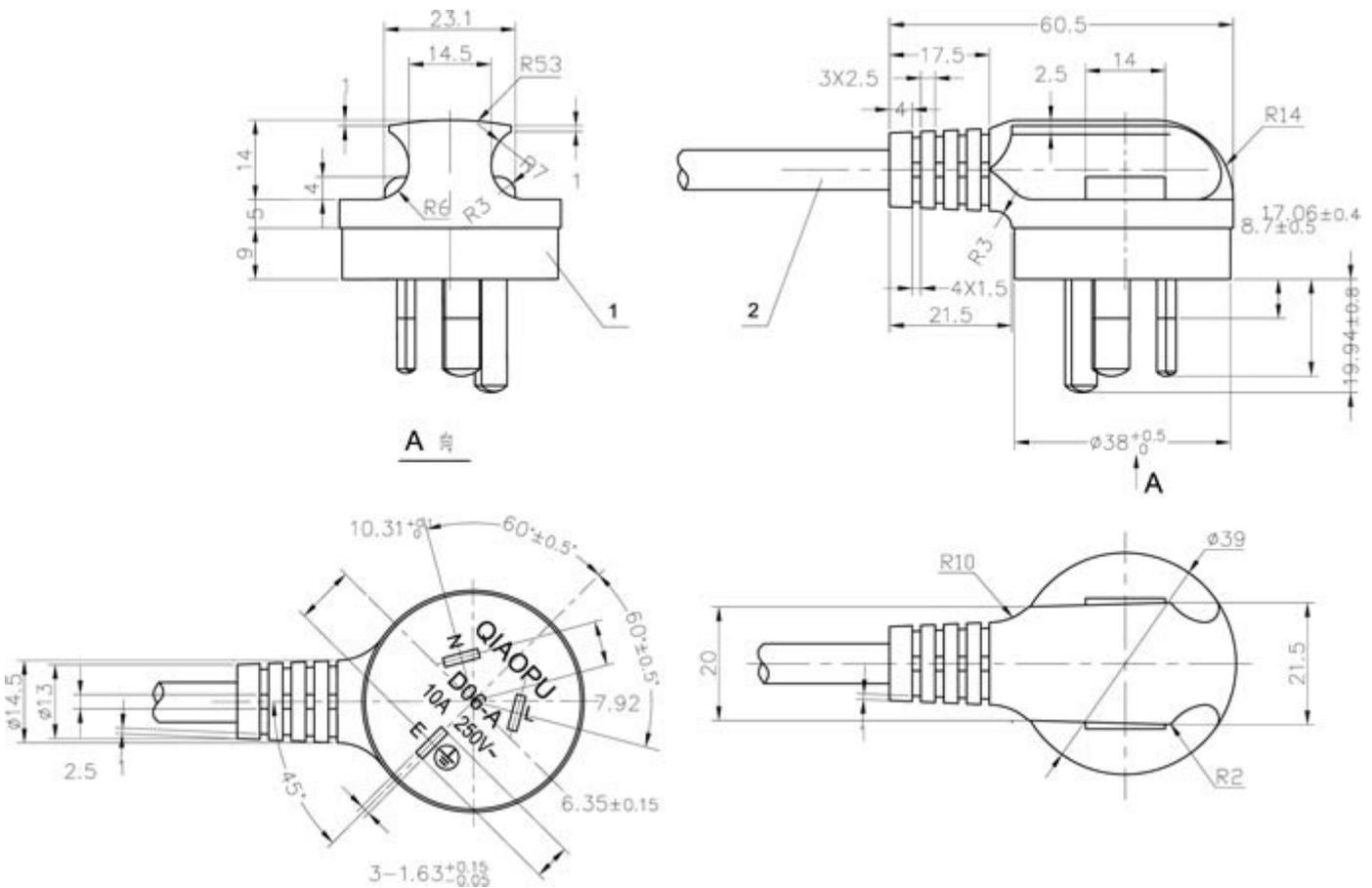
Linux Containers
(Docker)

Portability and reproducibility

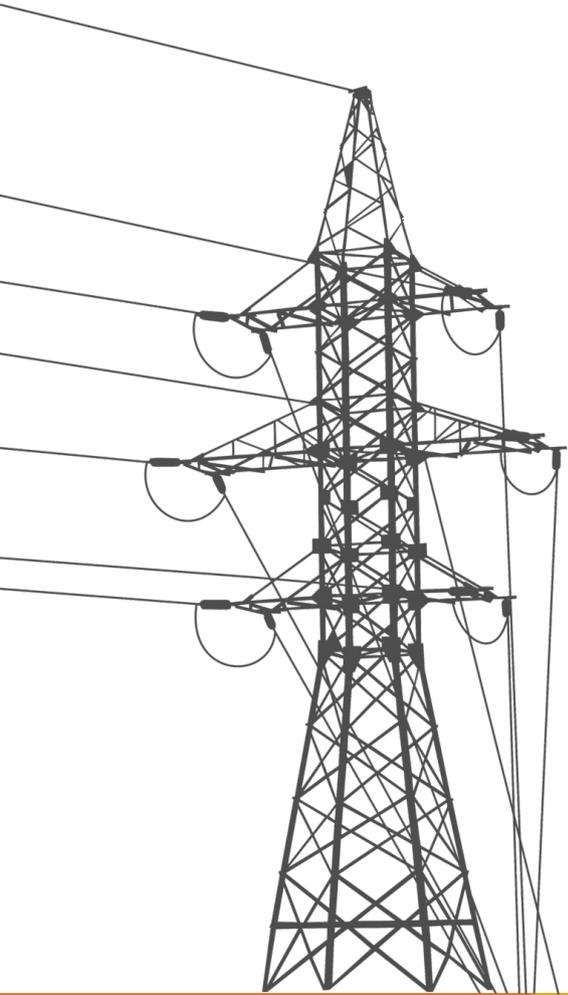


Orchestration

Adoption of open standards



Adoption of open standards

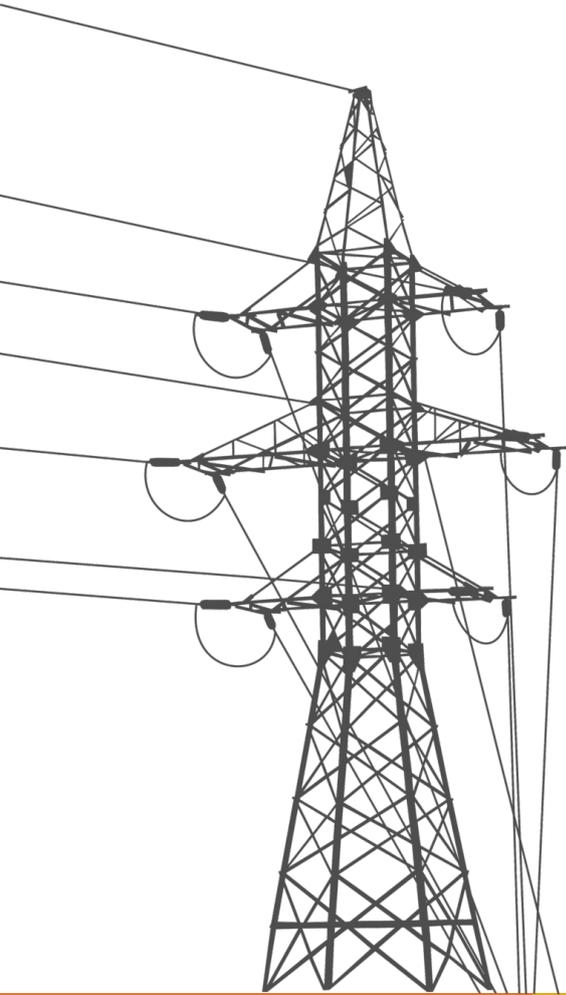


AS/NZS 3112 power plug

220V 50Hz



Adoption of open standards

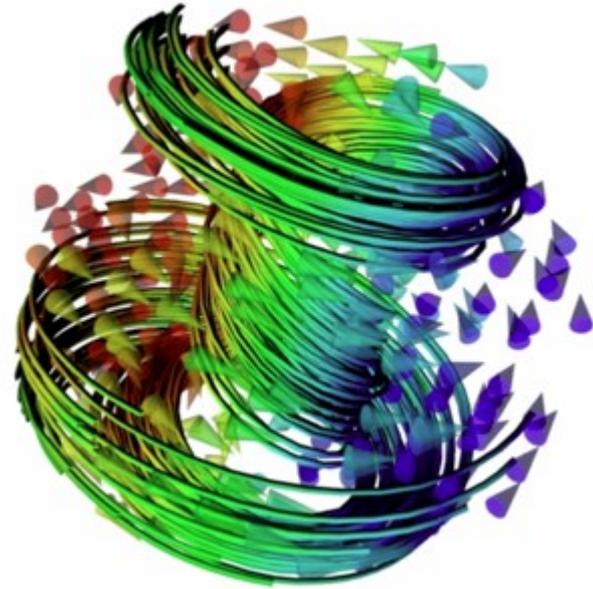


AS/NZS 3112 power plug

220V 50Hz



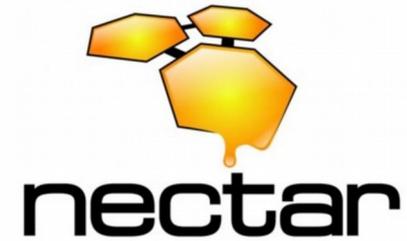
Open standard for cloud computing



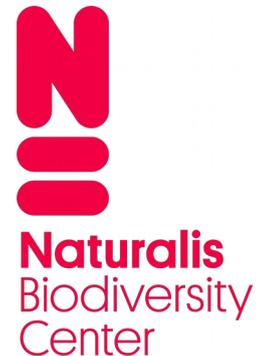
Who are using OpenStack?



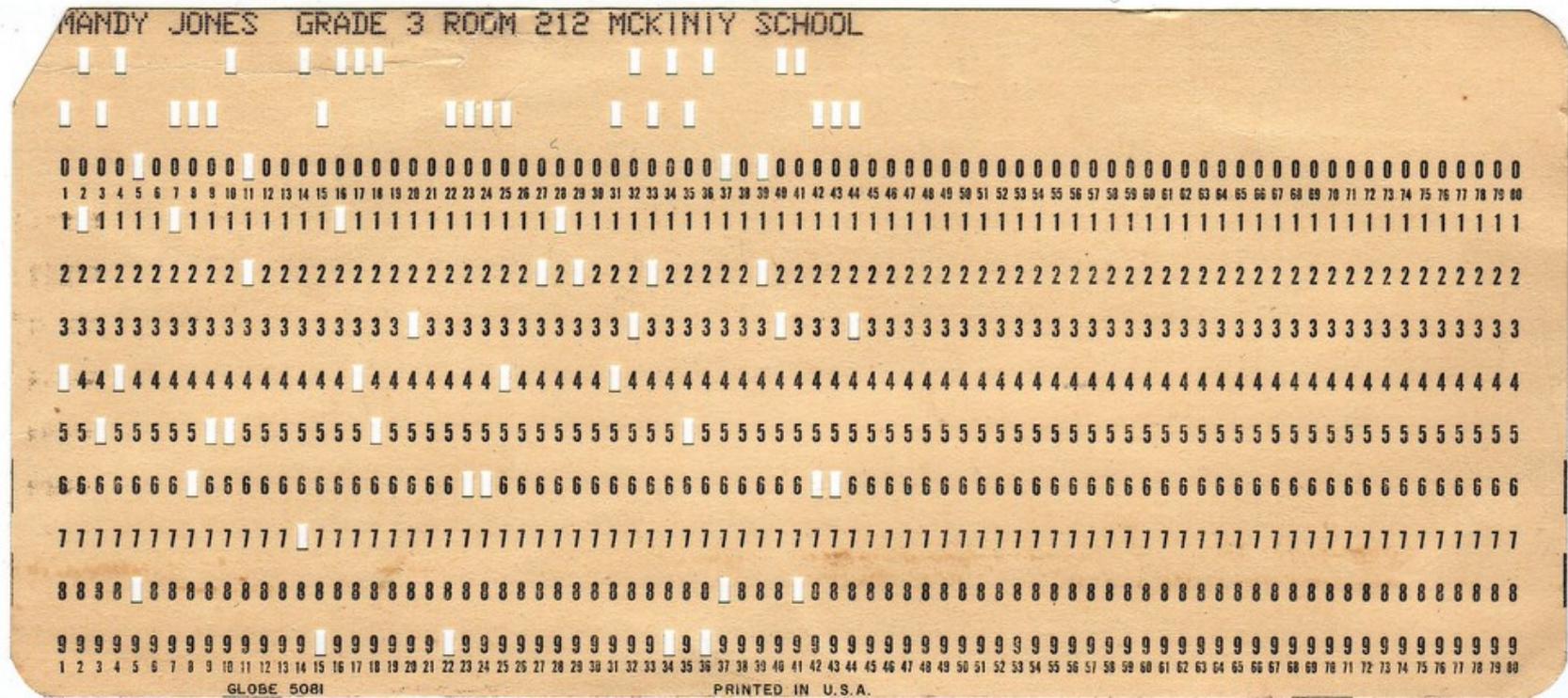
University of
Zurich^{UZH}



Massachusetts
Institute of
Technology

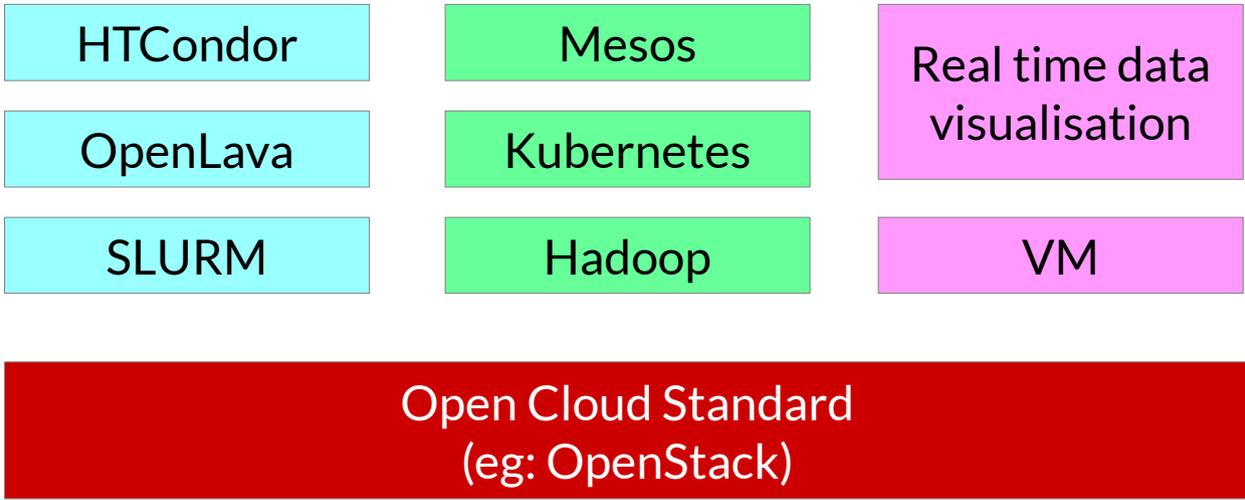


Digital research in NZ

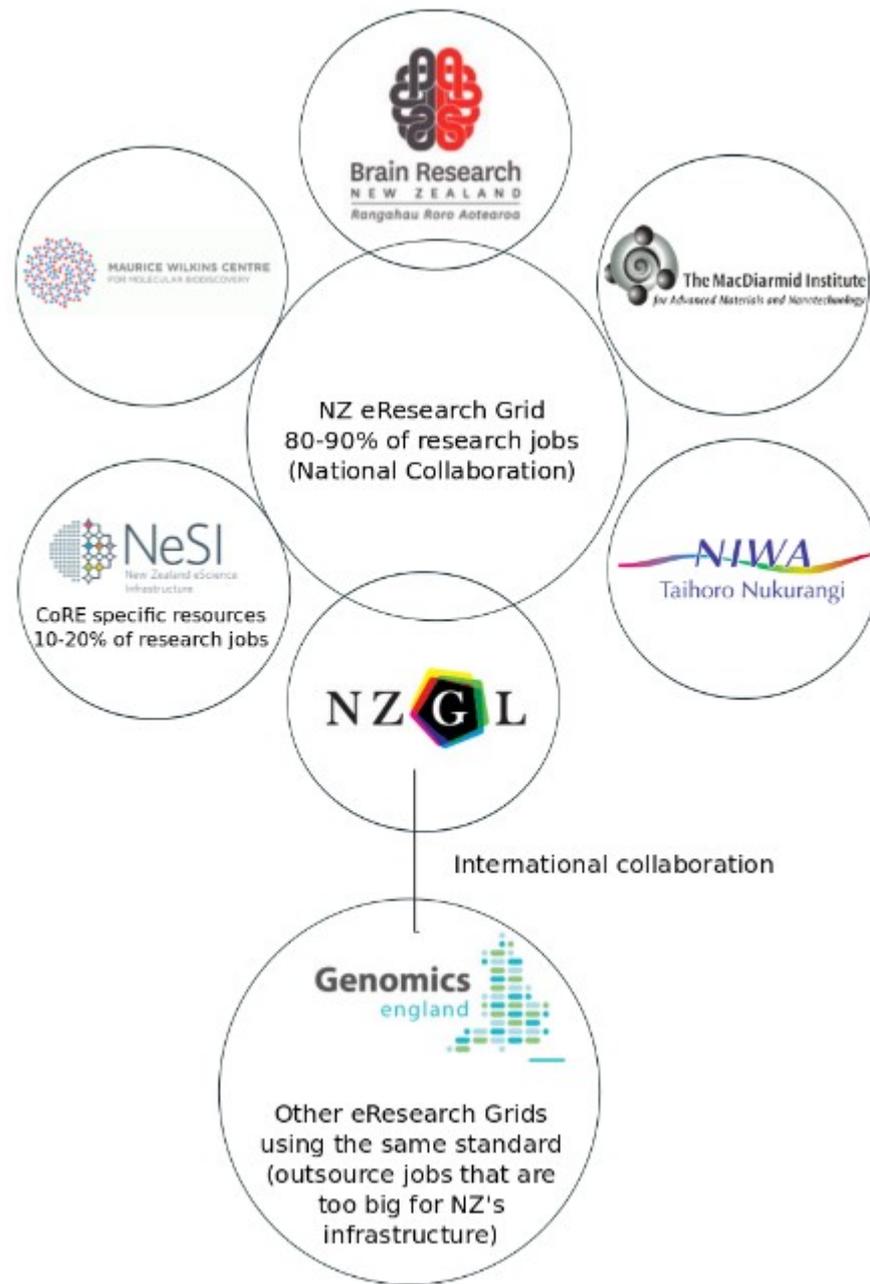


New Zealand is 5 to 10 years behind current trends and digital research infrastructure in Europe and North America

Future of digital research in New Zealand



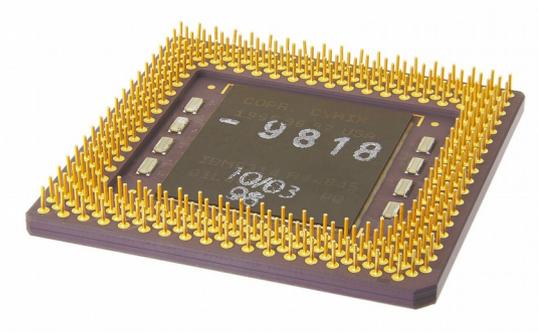




Present

Future of digital research in New Zealand

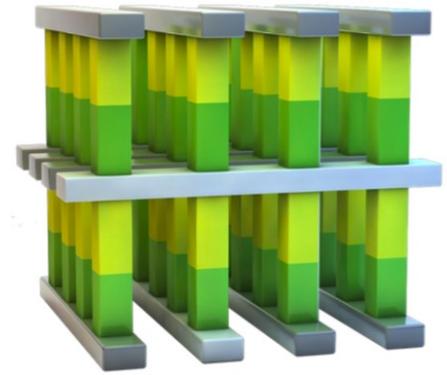
Future



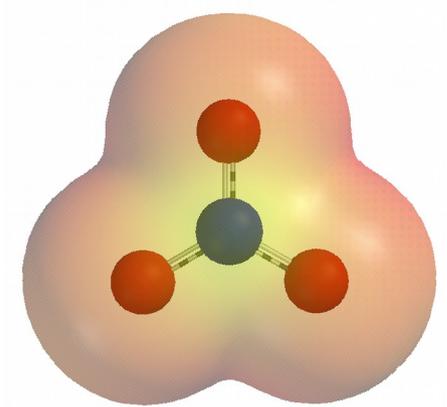
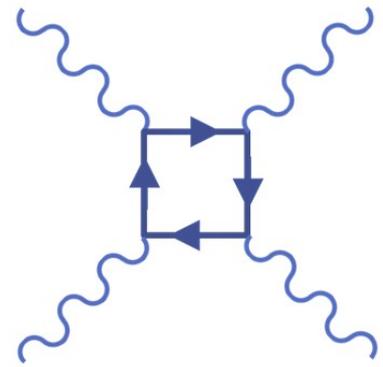
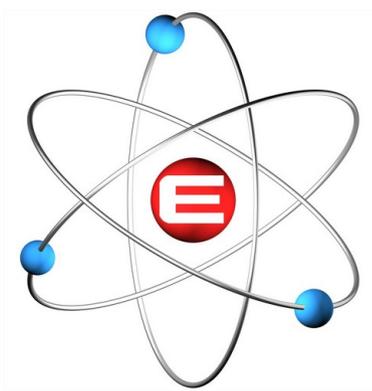
Electrons



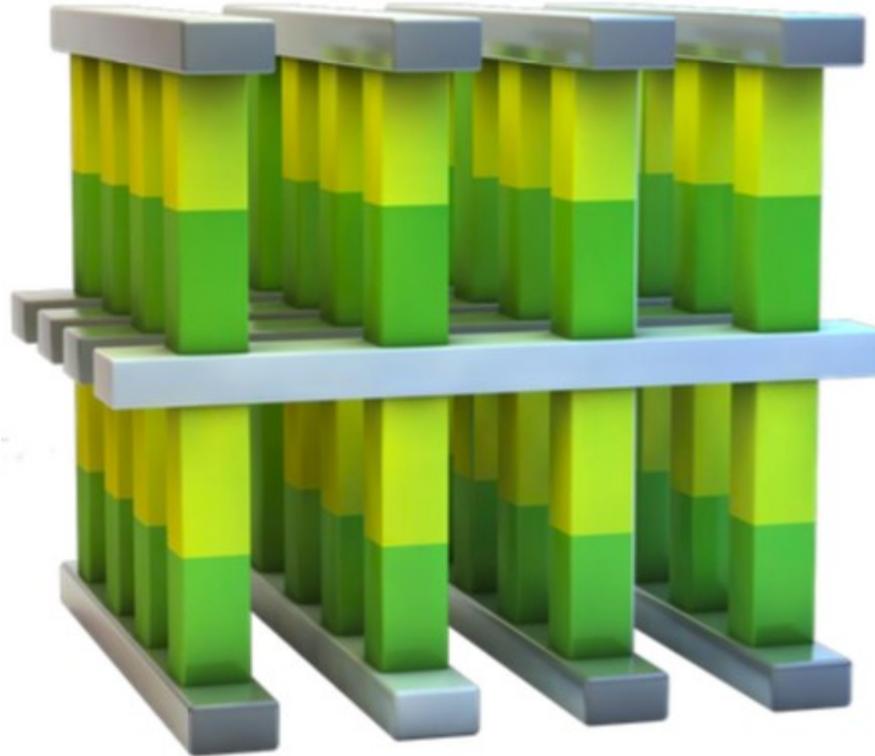
Photons



IONs



Future



Non-volatile memory as storage at
RAM speed