

S'pore a step closer to unhackable Internet

15 organisations involved in initiative to test quantum security software and hardware

Dominic Low

Singapore is a step closer to building an unhackable Internet for safeguarding citizens and customers' data with the setting up of the nation's first test bed for quantum cryptography.

Quantum cryptography uses the quantum properties of light particles to create an unbreakable cryptographic algorithm to secure satellite or fibre broadband communica-

of energy grids and e-banking transactions. Target users include those in the medical, finance and military sectors.

"Today's encryption methods are unlikely to withstand future attacks based on quantum computing technology," said Assistant Professor Charles Lim, who is the lead principal investigator for the project.

The network will be financed by NRF's Quantum Engineering Programme, with a funding of \$8.5 million over three years. The test bed



NUS Assistant Professor Charles Lim, director for cyber and information security, and lead principal investigator for the Quantum-Safe Network.

computers, and therefore encrypted data more easily.

For example, Japan's type quantum computer in 2017, could make calculations 100 times faster.