

Faculty of Science

Seminar Series 5



Dr Yap Yung Szen
Department of Physics
Faculty of Science
Universiti Teknologi Malaysia

DK 2, 111-Block C17,
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2.00 - 2.30 pm

Correcting errors in a quantum computer

All commercial supercomputers are classical computers whereby data are digital encoded on into one of two logic states which are then processed. In contrast, a quantum computer (QC) relies on quantum effects to perform information processing. The advantage: speedup its ability to simulate quantum systems – an ability crucial for various fields such as chemistry, nuclear physics, medicine, etc. In this talk, I will briefly introduce what is a quantum computer, errors that pose a problem in building one and possible ways overcome to them.