Trio debunked Nobel laureate’s test

BY SHOBANA KESAVA

THEY shot to fame within the scientific community last year when they debunked long-held beliefs in quantum physics, the study of the way energy and matter interact at the sub-atomic level.

For this and other pioneering work in one of science’s most challenging frontiers, three scientists from the National University of Singapore (NUS) received the National Science Award last night.

The team was lauded for its outstanding theoretical and experimental studies on quantum entanglements, which are the unseen links between different objects.

Using powerful machines, the team proved conclusively for the first time that these entanglements exist. In the process, they disproved a long-cherished test, developed by a Nobel laureate, which was thought to verify the existence of these entanglements.

Judges said the team of Associate Professor Christian Kurtsiefer, Associate Professor Valerio Scarani and Assistant Professor Antia Lamas-Linares helped scientists to gain a deeper understanding of quantum physics.

The team works at NUS’ Centre for Quantum Technologies, Singapore’s first research centre of excellence.