The Institute of Advanced Studies, College of Engineering and the School of Physical and Mathematical Sciences jointly present the Colloquium on:

Frontiers of Science & Implications for Technology

About the Talk
There are two ways to look at a frontier. One is to think of it as a boundary that defines the limit of where we can go, and we explore everywhere inside the frontier. The other is to think of the frontier as a fence, and we are like children at the fence, peering into the wild blue yonder. As we grow, we are able to push the boundary further, so that we can get to see more of the blue yonder. In this talk, I will review the bold frontiers of the past and give an overview of the frontiers of the present, and point to the fascinating interplay and implication for the development of new technologies.

Are there new frontiers to nanotechnology & photonics? Are there new frontiers to cosmology? How to adapt to new trends in technology?

About the Speaker
Prof Chang Ngee Pong is currently a professor of physics at the City College of CUNY. His area of specialisation is in High Energy Physics, and some of his research interests include spontaneous symmetry breaking in gauge theories of grand unification, implications for proton decay and the origin of neutrino masses.

Most recently, he has been working on the introduction of an extended family of the sextuplet CP-even and triplet CP-odd Higgs fields that couple to the 3 generations of quarks, following the suggestion of Friedberg-Lee.

Prior to joining the Institute of Advanced Studies (IAS) at NTU as a senior Fellow, he has held visiting positions at Ecole Normale Superior, CERN, Max Planck Institute Munich, University of Tokyo & Yukawa Institute as JSPS Fellow, KEK, Institute of Physics Academia Sinica Taiwan, the Institute for Advanced Study, Princeton in New Jersey, and elsewhere.