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**AMENDMENT**

**The Hong Kong University of Science and Technology**

**Department of Mathematics**

**Seminar on Pure Mathematics**

# **A q-normal distribution**

By

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## **Abstract**

The normal distribution is the weight function for the Hermite polynomials. Rogers introduced a q-analogue of the Hermite polynomials in his papers where he proved the Rogers-Ramanujan identities. Their weight function after renormalization is a q-analogue of the normal distribution. This was observed and studied by P. Szablowsky (2009) and more recently by Zhiiang Deng and Xiaomei Yang (2018). We will explain their contribution and how their observations lead to a whole new look at the q-orthogonal polynomials. The lecture is based on joint work with Dan Dai, Nick Smoot and Xiang-Sheng Wang.

**Date: Wednesday, 28 November 2018**

**Time: 3:00p.m. - 4:00p.m.**

**\* Venue: Room 4334, Academic Building  
(lift# 3), HKUST**

*All are welcome!*

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