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

**Department of Mathematics**

**Seminar on PDE**

**A fractional curvature flow on  $S^n$**

by

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**Abstract**

We first recall some techniques of scalar curvature flow on  $S^n$  developed in my previous paper joint with Professor Xingwang Xu (Invent. Math. 2012). Next, we extend such a flow approach to prove a perturbation result of the fractional Nirenberg problem, i.e. prescribing fractional Q-curvature problem on  $S^n$  for  $n \geq 3$  and the fractional exponent  $\frac{1}{2} < \sigma < 1$ . This is joint with Pak Tung Ho and Jingang Xiong.

**Date: Friday, 12 July 2019**

**Time: 11:00a.m. - 12:00noon**

**Venue: Room 3472, Academic Building  
(near Lifts 25 - 26), HKUST**

***All are welcome!***