## International Workshop Critical Phenomena

Date July 2-4, 2018

Venue SA223, Science Building I, NCTU

## Aim & Scope

While classical work in Sobolev spaces and harmonic analysis provide one with an adequate theory of the structure of functions and inequalities in the case p>1, a simple adaptation of these results to the critical case p=1 yields suboptimal results. In this workshop we will explore and engage in a number of topics related to this critical case, as well as dual results. In particular, we will hear from international experts about how recent developments in constructions of special solutions to PDE, Littlewood-Paley-type extensions, and ideas from geometric measure theory enable one to achieve in these critical cases results of comparable strength to what has classically been understood in other regimes.

## **Invited Speakers**

Filip Rindler

**Armin Schikorra** 

Jean Van Schaftingen

Chun-Yen Shen

Joan Verdera

Po Lam Yung

(University of Warwick)

(University of Pittsburgh)

(Université catholique de Louvain)

(National Taiwan University)

(Universitat Autònoma de Barcelona)

(The Chinese University of Hong Kong)

## **Organizers**

Daniel Spector

(National Chiao Tung University)









