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香港中文大學統計學系

Department of Statistics

THE CHINESE UNIVERSITY OF HONG KONG

# SEMINAR

DEPARTMENT OF STATISTICS  
THE CHINESE UNIVERSITY OF HONG KONG

**It<sup>o</sup>'s formula for flows of conditional measures on  
semimartingales**

## INVITED SPEAKER

Jiacheng Zhang

Postdoctoral Researcher

Industrial Engineering & Operations Research Department

Univeristy of California, Berkeley

## TIME

November 28, 2023 (Tue) · 2:30 pm - 3:30 pm

## VENUE

SWH1 · Fung King Hey Building Swire Hall 1 · CUHK

## ABSTRACT

We establish It<sup>o</sup>'s formula along flows of conditional probability measures given a common filtration associated with general semimartingales; this generalizes existing results for flows of conditional measures on It<sup>o</sup> processes and flows of deterministic measure on general semimartingales. Our approach is to first establish It<sup>o</sup>'s formula for cylindrical functions by introducing conditional independent copies and then extend it to the general case via function approximation.