



# SEMINAR

## SCHOOL OF MATHEMATICS AND STATISTICS

DATE: 06 FEBRUARY 2020

### TITLE

Around an abelian Schanuel conjecture

### VENUE | TIME

Seminar Room II  
04:30 – 05:30 PM

### SPEAKER

Prof. Patrice Philippon,  
UPMC Paris,  
France.

### ABSTRACT

After reviewing the method of classical algebraic independence theory, we explain an analogue of Schanuel's conjecture for abelian varieties, deduced from the generalisation by Andre of a conjecture of Grothendieck. We then show (joint work with Biswajyoti and Ekata Saha) that this conjecture implies the linear disjointness of the towers of fields build by iterations of the corresponding exponential function on one hand, and logarithm on the other hand.