

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE  
UNIVERSITY OF SOUTHERN DENMARK, ODENSE

## Mathematics seminar

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### Unimodality of the freely selfdecomposable probability laws

Friday 25 May 2018, 11:45-12:45  
IMADA Seminar Room

#### Abstract

In 1978 M. Yamazato settled in the positive the long standing conjecture on unimodality of the selfdecomposable probability laws. In doing so Yamazato also gave the first full proof of the unimodality of the stable distributions. In 1999 P. Biane proved that the stable distributions in free probability are unimodal, and in recent joint work with T. Hasebe the speaker established that the same conclusion in fact holds for all selfdecomposable laws in free probability. The talk will present an outline of the proof of the latter result and describe some of the involved techniques based on Stieltjes inversion.