Workshop dedicated to the memory of Professor Gabriela Kohr
Geometric Function Theory in Several Complex Variables and Complex Banach Spaces

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Non-commutative probability and Loewner chains

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Abstract

Recently, very interesting interrelation with non-commutative probability and Loewner theory was established by Franz, Hasebe and Schleissinger. In their work, a bijection between "multiplicative Loewner chains on the unit disk" and "unitary multiplicative processes of monotonically independent increments" was formulated. In this talk, as an extension of their work, we introduce another bijection between "multiplicative Loewner chains on the unit disk" and "unitary multiplicative processes of classical (tensor) independent increments". This talk is based on a joint work with Takahiro Hasebe.