

Contributed Talk

***g*-Loewner chains and the Graham-Kohr extension operator in complex Banach spaces**

Eduard Grigoriuc

Babeş-Bolyai University & ICTP, Cluj-Napoca, Romania

Abstract

Starting from the recent results proved by I. Graham, H. Hamada, G. Kohr and M. Kohr, we focus our attention on the Graham-Kohr extension operator (introduced by I. Graham and G. Kohr in 2002) and its properties.

In particular, we prove that the Graham-Kohr extension operator preserves the first elements of *g*-Loewner chains on the unit disc to the first elements of *g*-Loewner chains on the domain $\Omega_{p,r}$ in a complex Banach space X , where $\Omega_{p,r} = \{(z_1, w) \in \mathbb{C} \times X : |z_1|^p + \|w\|_X^r < 1\}$ for $p, r \geq 1$.