Workshop dedicated to the memory of Professor Gabriela Kohr
(2nd edition)
Geometric Function Theory in Several Complex Variables and Complex Banach Spaces

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On Loewner chains and related problems for bounded balanced pseudoconvex domains in $\mathbb{C}^n$

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Abstract

Let $\Omega \subset \mathbb{C}^n$ be a bounded balanced pseudoconvex domain with C^1 plurisubharmonic defining functions. First, we present a proof of the compactness of the Carathéodory family $\mathcal{M}(\Omega)$ with respect to the topology of locally uniform convergence on $H(\Omega)$. Next, we survey some results in the theory of Loewner chains on Ω, which are extensions of corresponding results on the Euclidean unit ball.

This talk is based on joint work with Hidetaka Hamada and Gabriela Kohr.