

---

*Workshop dedicated to the memory of Professor Gabriela Kohr  
(4th edition)*

**Geometric Function Theory in Several Complex Variables and Complex Banach Spaces**

Cluj-Napoca, Romania

November 29 – December 1, 2024

---

## **On some coefficients inequalities in one and several variables**

Paula Curt

Babeş-Bolyai University, Cluj-Napoca, Romania

### **Abstract**

In this talk we study first the bounds of the difference of moduli of initial successive coefficients, i.e.  $||a_{n+1}| - |a_n||$  for  $n = 1, 2$  for some subclasses of univalent functions defined on the unit disk of the complex plane (i.e  $\alpha$ -convex functions, Janowski starlike and convex functions). Also, we extend the above sharp inequalities to several complex variables. We investigate similar inequalities for  $\alpha$ -quasi-convex mappings of type B and Janowski type mappings defined on the open unit ball of a complex Banach space.