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*Workshop dedicated to the memory of Professor Gabriela Kohr  
(2nd edition)*

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

Cluj-Napoca, Romania

1–3 December 2022

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## **Geometric versions of Schwarz's lemma for spherically convex functions**

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### **Abstract**

We discuss several sharp distortion and monotonicity theorems for spherically convex functions defined on the unit disk involving geometric quantities such as spherical length, spherical area and total spherical curvature. These results can be viewed as geometric variants of the classical Schwarz lemma for spherically convex functions.

Joint work with Maria Kourou.