Minicourse: *Analysis on polydiscs*

Course Summary

Rudin's classic treatise "Function Theory in Polydiscs" from 1969 studies complex analysis on polydiscs starting from the following question: How much of our extremely detailed knowledge about holomorphic functions in the unit disc can be carried over to an analogous situation in several variables, namely to polydiscs? A different perspective comes from the work of Bohr and Bohnenblust–Hille several decades earlier; here the main issue is function theory in the infinite-dimensional polydisc, which to a large extent is concerned with the asymptotics of function theory in finite-dimensional polydiscs. I will discuss some examples, old and new, of what these different viewpoints have led to, as well as connections to other areas and ongoing research.