Workshop dedicated to the memory of Professor Gabriela Kohr
Geometric Function Theory in Several Complex Variables and Complex Banach Spaces

Cluj-Napoca, Romania   1 – 3 December 2021

Plurisubharmonic domination

Laszlo Lempert
Purdue University, West Lafayette, USA

Abstract

Plurisubharminic domination is a concept in complex analysis of infinite dimensional manifolds that can, in some cases, replace the device of compact exhaustion, much used in finite dimensional analysis. The plan of the talk is to introduce the notion of plurisubharmonic functions and pseudoconvex domains in Banach spaces, formulate the domination theorem (due to Patyi and myself), and indicate the proof and applications.