

Mathematical Colloquia

Monday, 16 September 2019

17:15 h, Lecture Room 228

Dr. George Ionita, Rumanian Academy of Sciences

An Introduction to q -convexity

Abstract:

We make a gentle introduction into the world of q -convexity on complex spaces. At first we motivate the concepts that lead to this so called q -convexity and we give the necessary definitions. The notion of a q -convex function was introduced by Andreotti and Grauert in 1962. Along the way we give examples and present some of the relevant theorems in the literature.

In the second part of the talk, we focus on recent results. Two of them are obtained in connection with the Levi Problem, one of the most difficult and important problems in Several Complex Variables.

At last we present open questions together with problem lists and surveys written by some of the main contributors in the field.