

TITLE: Some remarks on the notion of parabolicity in several complex variables

ABSTRACT:

As it is well known, an open Riemann surface is called parabolic in case every bounded subharmonic function on it reduces to a constant. Several authors introduced analogs of this notion for Stein manifolds of arbitrary dimension. In this talk, we will compare the different definitions of parabolicity that exists in literature and brings to attention a problem in complex potential theory that arise in this framework. This problem could also be looked at from a functional analysis point of view. We will give some examples of "parabolic manifolds" and talk about some results obtained jointly with A. Sadullaev in this context.