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**Approximation of plurisubharmonic functions on Stein manifolds by functions of type  $\alpha \cdot \log |f|$  , where  $\alpha \in \mathbb{R}^+$  and  $f$  holomorphic: Lelong-Bremermann Lemma.**

Abstract

Taking into account the diverse background of the members of the analysis seminar, the first part of the talk will be devoted to setting the stage, i.e. defining PSH functions discussing their elementary properties etc. In the second part of the talk I will report on a joint research with V. Zaharyuta about approximation (uniformly on compact subsets) of continuous plurisubharmonic functions on Stein manifolds by maximums of finite number of functions of type  $\alpha \cdot \log |f|$  , where  $\alpha \in \mathbb{R}^+$  and  $f$  holomorphic.