A survey on q-plurisubharmonic functions and their relation to q-pseudoconvex sets

Speaker

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Abstract

We give a survey on results on q-plurisubharmonic functions in $\mathbb{C}^n$, their different characterizations, approximation techniques and their relation to q-pseudoconvex sets. For example, q-pseudoconvex convex sets appear as complements of complex analytic sets of certain dimension. For $q = 0$ we obtain the classical plurisubharmonic functions and pseudoconvex sets which are one the most important notions in Complex Analysis in several variables.