

**q -PLURISUBHARMONICITY AND
 q -PSEUDOCONVEXITY IN \mathbb{C}^n**

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Abstract

We generalize classical results for plurisubharmonic functions and hyperconvex domain to q -plurisubharmonic functions and q -hyperconvex domains. We show, among other things, that B_q -regular domains are q -hyperconvex. Moreover, some smoothing results for q -plurisubharmonic functions are also given.

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Key words. q -plurisubharmonic, q -convex, q -pseudoconvex, q -hyperconvex, B_q -regular domain.