WEAK LINEAR CONVEXITY AND A RELATED NOTION OF CONCAVITY

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Weak linear convexity is a property of open sets in \mathbb{C}^n which is stronger than pseudoconvexity. Characterization of these sets, which are weakly linearly convex, bounded, connected with \mathcal{C}^2 boundary is known, due to C. O. Kiselman's papers. We present Hörmander condition on weak linear convexity for open, bounded and connected sets with \mathcal{C}^1 boundary which satisfy interior ball condition. The proof of theorem is based on a study of the squared distance function to the boundary of a given set.