

$$p(u - v) \leq \delta^p + \gamma[\eta(C)] + \int_{c(x)}^c \eta(s) ds.$$

The proof follows by setting $\mu'(s) = \eta(s)$, $y = m - \mu[c(x)]$, where m is a constant so chosen that the function $p(u - v) - y$ does not assume a positive maximum on ∂B .

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COMPLETE LOCALLY AFFINE SPACES AND ALGEBRAIC HULLS OF MATRIX GROUPS

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Let M be a complete Riemann manifold with curvature and torsion zero. If $\pi_1(M)$ denotes the fundamental group of M , then Bieberbach [3; 4] proved that $\pi_1(M)$ contains an abelian normal subgroup of finite index. Moreover, if M is compact then M is covered by a torus.

In recent years the study of general affine connections has led to the study of the following problem: How can one classify the manifolds which possess a complete affine connection with curvature and torsion zero? Such manifolds will be called complete locally affine spaces.

It was Zassenhaus [6] who first gave a general setting to the Bieberbach theorem. He showed a special case of the following theorem:

THEOREM 1. *Let G be a connected Lie group with its radical R simply connected, $\rho: G \rightarrow G/R$ the projection, and L a closed subgroup of G . If the identity component L_0 of L is solvable, then the identity component of the closure of $\pi_1(L)$ is solvable.*

This theorem in this generality is due to H. C. Wang [5] and his

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