

ON DIFFERENTIABLE RIEMANNIAN BANACH MANIFOLDS

EL-SAID R. LASHIN¹ AND A. A. ALMANIF²

¹ Department of Mathematics,
Faculty of applied Science, Umm Al Qura university,
Makkah, Saudi Arabia

² Scientific Departments, Collage of Girls,
Riyadh, Saudi Arabia

Abstract

Theory of differentiable infinite dimensional manifolds [1], [2], [3], [4], [5] and [6] evolved considerably over the last thirty years. In the present work, we proved that the metric tensor of a locally plane Riemannian Banach manifold will be constant. We also found the necessary and sufficient conditions for a Riemannian Banach manifold to be locally plane.

Key Words : *Banach manifold, Strong non-singular metric, Locally plane space, Ricci's identity, Bianchi's identity.*

AMS Subject Classification : 53C40.

© <http://www.ascent-journals.com>