

# Title: Einstein doubly warped product Poisson manifolds

## Abstract

In this presentation, we study Einstein doubly warped product Poisson manifolds. First, we express the Levi-Civita contravariant connection, curvature tensor, Ricci tensor and scalar curvature of a doubly warped product Poisson manifold  $({}_fB \times_b F, \tilde{g}, \Pi)$  in terms of Levi-Civita connections, curvatures, Ricci tensors and scalar curvatures of its factor manifolds  $(B, \tilde{g}_1, \Pi_1)$  and  $(F, \tilde{g}_2, \Pi_2)$  respectively. Then, we give necessary and sufficient conditions for a doubly warped product Poisson manifold  $(M = {}_fB \times_b F, g, \Pi)$  to be an Einstein manifold. Finally, we give an example of doubly warped space-time.