

Meeting: 999, Nashville, Tennessee, SS 5A, Special Session on Topological Aspects of Group Theory

999-55-34 **Peter J. Hilton*** (megwelsh2@aol.com), Department of Mathematical Sciences, Binghamton University, Binghamton, NY 13902-6000. *The contributions of Jean-Pierre Serre to the development of algebraic topology.*

Jean-Pierre Serre revolutionized homotopy theory in many ways in the early 1950's. He showed just how the spectral sequence theory of Leray-Koszul could be used to study the homology relations between base space, fiber and total space in a Serre fibration, and then how the information so obtained could be used to calculate homotopy groups (for example of spheres).

Vivid examples of his remarkable insights will be given. (Received July 16, 2004)