

Meeting: 1000, Albuquerque, New Mexico, SS 8A, Special Session on Interactions in Riemannian Geometry

1000-53-80 **Philippe Rukimbira*** (rukim@fiu.edu), Florida International University, Department of
Mathematics, DM 416, Miami, FL 33199. *K-nullity interactions with contact metric geometry.*

The dimension of the 1-nullity distribution on a closed sasakian manifold M of rank l is at least $2l - 1$ provided that M has an isolated closed characteristic. On a closed, $2n + 1$ dimensional sasakian manifold of positive bisectional curvature, it is shown that either the dimension of the 1-nullity is less or equal to $n + 1$ or it is $2n + 1$. Additional interactions will be pointed out between k-nullity, Weinstein conjecture and minimality of unit vector fields. (Received August 16, 2004)