1086-53-1479 **Charles P Boyer*** (cboyer@math.unm.edu), Department of Mathematics and Statistics, MSC01 1115, 1, University of New Mexico, Albuquerque, NM 87131. *The Join Construction and Extremal Sasakian Geometry.* Preliminary report.

My talk is based on joint ongoing work with Christina Tønnesen-Friedman. We give a general approach using the join construction in Sasakian geometry to describe extremal Sasaki metrics on a host of smooth contact manifolds. Such structures often occur in bouquets of Sasaki cones. We briefly describe these in the case of S^3-bundles over Riemann surfaces of arbitrary genus as well as certain Sasakian manifolds with a perfect fundamental group arising as the join with homology 3-spheres. (Received September 22, 2012)