1172-53-34 **Christina Wiis Tønnesen-Friedman*** (tonnesec@union.edu), Dept of Math, Union College, 807 Union St, Schenectady, NY 12308. *Sasakian geometry on sphere bundles.*

This talk, which is based on recent work with Charles P. Boyer, will discuss the question of existence and non-existence of extremal and constant scalar curvature Sasaki metrics on odd dimensional sphere bundles over a smooth projective algebraic variety. We will apply the so-called fiber join construction for K-contact manifolds, introduced by T. Yamazaki around the turn of the century, to the Sasaki case and study the transverse regular Kähler structures in several cases. (Received August 09, 2021)