## 1146-54-270 Maggie Miller\* (maggiem@math.princeton.edu). Fibering 4-manifolds over S<sup>1</sup>.

I will discuss the strategy for finding a (possibly singular) fibration of a 4-manifold  $X^4$  with or without boundary over  $S^1$ . In particular, I will focus on the case that  $X^4$  is the complement of a ribbon disk D in  $B^4$  where the boundary of D is a fibered knot in  $S^3$ . (One can show that  $X^4$  smoothly fibers when D satisfies a transversality condition; in particular, it is sufficient for D to have two minima.) In this short talk, I will give a bare-bones example of constructing a smooth fibration of an explicit ribbon disk complement. (Received January 24, 2019)