1114-57-44 **M. Chrisman*** (mchrisma@monmouth.edu), **A. Kaestner** and **R. Todd**. *Some Geometric Applications of Virtual Knot Theory.* Preliminary report.

We present several interrelated geometric applications of virtual knot theory: concordance invariants of knots in fibered 3-manifolds, slice disc and ribbon disc obstructions for links in $\mathbb{S}^3$, and the weak injectivity of satellite operators having nonzero winding number on a large class of smooth knots in fibered 3-manifolds. The main technical tool is the principle of virtual covers, where an oriented virtual knot is associated to an oriented knot in a c.c.o 3-manifold possessing a regular covering by a thickened c.c.o surface. The associated virtual knot, when it exists, is a smooth concordance invariant. The applications follow from this observation. (Received July 16, 2015)