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Peter Feller and **Arunima Ray*** (aruray@brandeis.edu), Brandeis University, Mathematics Department MS050, 415 South St, Waltham, MA 02453. *Independence of satellite knots in smooth concordance*. Preliminary report.

It was recently shown that ‘strong winding number one’ satellite operators give injective functions on the smooth knot concordance group, modulo the smooth 4–dimensional Poincaré Conjecture. Here we address the related question of whether such satellite operators preserve independence in the concordance group; in particular we confirm this for certain families of torus knots. This is of interest since A. Levine has recently shown that strong winding number one satellite operators may be non-surjective on the concordance group. We also give several related applications of our techniques. (Received August 10, 2015)