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**Bridget D Franklin\***, 6100 S Main St, Rice University – MS 136, Houston, TX 77005.

*Obstructing concordance of related satellite operations.*

Various obstructions to knot concordance have been found using Casson-Gordon invariants, higher-order Alexander polynomials, as well as von-Neumann  $\rho$ -invariants. Examples have been produced using (iterated) satellite operations, described by  $K = R(\eta, J)$ , and considering these as parametrized by invariants of the base knot  $J$  and doubling operator  $R$ . Here, we introduce a method to obstruct concordance based upon the class of  $\eta$  in  $\pi_1(S^3 \setminus R)$ . Although the usual invariants fail, distinct concordance classes are found even while fixing the knots  $J$  and  $R$ , as well as the class represented by  $\eta$  in the Alexander module. (Received September 18, 2011)