1126-03-74   **David Marker*** (`marker@uic.edu`), Dept Mathematics (MC 249), University of Illinois at Chicago, 851 S. Morgan St., Chicago, IL 60607. *Complexity of counterexamples to Schanuel's Conjecture.* Preliminary report.

Using ideas of Kirby we show that if Schanuel's Conjecture is false, then there are computable counterexamples. Indeed there are natural closure operators on the complex numbers such that there are counterexamples in the smallest closed set. Using these observations we show that Schanuel's Conjecture, which at first glance is a Π^1_1 statement, has a Π^0_3 formulation. These observations arose in discussions with Lou van den Dries and Angus Macintyre. (Received January 02, 2017)