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**David Bachman, Ryan Derby-Talbot\*** (rdt@questu.ca) and **Eric Sedgwick**. *Computing Heegaard genus is NP-hard*. Preliminary report.

We show the problem of determining when a 3-manifold admits a Heegaard splitting of genus less than or equal to  $g$  is NP-hard. We do this by converting the calculation of the Heegaard genus of certain toroidal 3-manifolds into a satisfiability question for Boolean formulas in conjunctive normal form. The latter problem is known to be NP-complete. (Received August 09, 2016)