1139-11-374 Benjamin K Breen* (benjamin.k.breen.gr@dartmouth.edu). Heuristics for narrow class groups in number fields of even degree. Preliminary report.

We extend the work of Dummit-Voight on heuristics for narrow class groups and unit signature ranks of number fields of odd degree to the case of even degree. In this case an obstruction occurs from classes of the 2-Selmer group represented by rational numbers. We explore how this affects our model and provide computational evidence for our heuristics in the case of totally real quartic fields with Galois closure S4. (Received February 16, 2018)