1116-VN-996 Qingquan Wu* (qingquan.wu@tamiu.edu), 5201 University Blvd, TAMIU, Math & Physics, Laredo, TX 78041. Certain number fields with an explicit integral basis. Preliminary report.

It is known that an explicit integral basis is rare for number fields, except for certain types. Based on the previous work on radical function fields, we anticipate that there are certain number fields K with explicit integral bases. The construction is based on a technique to calculate the ramification indices for various primes in the absolute field extension K/\mathbb{Q} . (Received September 15, 2015)