1145-11-777 **Robet Hines*** (robert.hines@colorado.edu). *Badly approximable numbers over imaginary quadratic fields.* Preliminary report.

We recall the notion of nearest integer continued fractions over the Euclidean imaginary quadratic fields K and characterize the "badly approximable" numbers, (z such that there is a $C = C(z) > 0$ with $|z - p/q| \geq C/|q|^2$ for all $p/q \in K$), by boundedness of the partial quotients in the continued fraction expansion of z. Applying this algorithm to "tagged" indefinite integral binary Hermitian forms demonstrates the existence of entire circles in $\mathbb{C}$ whose points are badly approximable over K, with effective constants.

By other methods (the Dani correspondence), we prove the existence of circles of badly approximable numbers over *any* imaginary quadratic field. Among these badly approximable numbers are algebraic numbers of every even degree over $\mathbb{Q}$, which we characterize. All of the examples we consider are associated with cocompact Fuchsian subgroups of the Bianchi groups $SL_2(\mathcal{O})$, where $\mathcal{O}$ is the ring of integers in an imaginary quadratic field. (Received September 14, 2018)