Errata: Non-arithmetic hybrid lattices in PU(2, 1)

Joseph Wells

October 26, 2020

It was pointed out by Irene Pasquinelli that there are some small errors in the original version of this paper, which were unfortunately discovered after the paper had been published. They are not major flaws, but nonetheless should be corrected for future references. The corrections below reference the numberings in the published version [3], which may differ from the preprints as hosted on the author's webpage.

- 1. In Mostow's original paper [1], the lattice corresponding to (p, t) = (5, 11/30) is listed as being non-arithmetic, when in fact it is arithmetic (see Parker's survey [2, p. 27]). This means that $\Gamma(5, 11/30)$ should not appear in the main theorem nor in Corollary 10.
- 2. Table 3: Properties of Γ_1 : The triangle group referenced in the (p,t) = (3, 1/18) case shows $\Delta(2, 6, 18)$ but should actually be $\Delta(2, 9, 18)$.
- 3. Per the work in Section 5, the lattice corresponding to (p, t) = (3, 11/12) should appear in the main theorem and in Corollary 13.

References

- G. D. Mostow. On a remarkable class of polyhedra in complex hyperbolic space. *Pacific J. Math.*, 86(1):171–276, 1980.
- [2] John R. Parker. Complex hyperbolic lattices. In *Discrete groups and geometric structures*, volume 501 of *Contemp. Math.*, pages 1–42. Amer. Math. Soc., Providence, RI, 2009.
- [3] J. Wells. Non-arithmetic hybrids lattices in PU(2,1). Geom. Ded., 2019. DOI: 10.1007/s10711-019-00506-5.

JOSEPH WELLS DEPARTMENT OF MATHEMATICS VIRGINIA TECH joseph.wells@vt.edu