Immersed turnovers in hyperbolic 3-orbifolds

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Abstract. A hyperbolic turnover is a 2-orbifold isometric to the double of a hyperbolic triangle whose interior angles are integer submultiples of π. In this talk, I will show that if a hyperbolic 3-orbifold Q contains an immersed (but non-embedded) hyperbolic turnover T, then Q contains a hyperbolic 3-suborbifold Q' which contains T, with $\mathrm{Vol}(Q') < 6/5*\mathrm{Area}(T)$. Furthermore, I will show that for a given turnover type, there are only finitely many possibilities for such a "turnover core" Q'.