MEAN CURVATURE FLOW AND FOLIATIONS OF HYPERBOLIC 3-MANIFOLDS

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ABSTRACT. In this talk, I will describe how to combine the level set flow and the mean curvature flow with surgery to show that quasi-Fuchsian 3-manifolds and hyperbolic 3-manifolds fibered over the circle admit smooth entire foliations whose leaves are either minimal or have non-vanishing mean curvature. This is joint work with Marco Guaraco (Imperial College) and Franco Vargas Pallete (Yale University).

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