Chasing Cannon-Thurston

Saul Schleimer, University of Warwick

This is joint with David Bachman and Henry Segerman. For every hyperbolic threemanifold equipped with the structure of a surface bundle there is an associated "curve" that "fills" the sphere; the \emph{Cannon-Thurston map}. Aided by many many pictures, drawn both by hand and by computer, I will explain what the Cannon-Thurston map is, some previous attempts to draw it, and our attempts. As a matter of fact, we exactly failed to draw the Cannon-Thurston map; instead we (appear to) have discovered a dual object.