SYLVAIN MAILLOT, Université Louis Pasteur, Strasbourg, France *Ricci flow with surgery on open 3-manifolds and positive scalar curvature*

In his proof of the Poincaré Conjecture, G. Perelman constructs an object called Ricci flow with surgery on every closed, orientable 3-manifold. I will describe a variant of this construction, which works in the more general setting of complete 3-manifolds of bounded geometry. I will outline applications to the topological classification of complete 3-manifolds with positive scalar curvature and to the Poincaré Conjecture.

This is joint work with Laurent Bessières and Gérard Besson.