Quasi-morphisms on surface diffeomorphism groups

Speaker: Jonathan Bowden

Abstract: I will discuss recent work with Sebastian Hensel and Richard Webb on building quasi-morphisms on the identity component of diffeomorphism of higher genus surfaces, thus answering a question posed by Burago-Polterovich-Ivanov in 2008. The main tool for this is a new "dagger" curve graph, which is a Gromov hyperbolic space on which surface diffeomorphisms naturally act. I aim to put the result into some context and outline the main ideas of the proof.