

# Rewriting in weak higher categories

Amar Hadzihanovic

At the heart of higher-dimensional rewriting theory is an interpretation of rewrites as homotopies, linking computation with combinatorial topology. However, it has proven challenging to develop a language for the theory that is both expressive and sound for this interpretation. I will give an overview of this problem, and how it relates to “pasting theorems” and “coherence theorems” in higher category theory, before presenting a potential solution in the form of “diagrammatic sets”.