2-COMPLEXES WITH THE NON-POSITIVE IMMERSION PROPERTY

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Abstract: A 2-complex X has non-positive immersions if every compact connected, non-contraactible 2-complex Y admitting an immersion $X \to Y$ has non-positive Euler characteristic. This concept was introduced by Dani Wise in connection with Baumslag's conjecture that one-relator groups are coherent. A theorem of Helfer and Wise – and independently of Louder and Wilton - says that the geometric realisation of a torsion-free one-relator group presentation has the non-positive immersions property. I will present a relative version of this theorem, together with a umber of related results. This is joint work with Hamish Short.