Examples of Non-Rigid CAT(0) Groups from the Category of Knot Groups

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Abstract. A CAT(0) group G is said to be rigid if it has the property that any two CAT(0) spaces on which G acts geometrically have homeomorphic visual boundaries. C. Croke and B. Kleiner constructed an example of a nonrigid CAT(0) group. Specifically, they showed that G acts on two different CAT(0) spaces whose boundaries admit no homeomorphism. Indeed, J. Wilson proved that this same group has uncountably many non-homeomorphic boundaries. Following Wilson's work, we will sketch a proof that the fundamental group of a connect sum of two torus knots also has uncountably many non-homeomorphic boundaries.