

## ITERATION OF FUNCTIONS AND CONTRACTIBILITY OF ACYCLIC 2-COMPLEXES

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**Abstract:** We show that there can be no algorithm to decide whether infinite recursively described acyclic aspherical 2-complexes are contractible. We construct such a complex that is contractible if and only if the Collatz conjecture holds.

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**Key words:** contractibility, 2-complex, iteration, Collatz function.