

On Maximal Collections of Essential Annuli in a Handlebody

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It is known that, for a maximal collection \mathcal{A} of pairwise disjoint non-parallel essential annuli in a handlebody of genus 2, $1 \leq |\mathcal{A}| \leq 3$. We show that for a maximal collection \mathcal{A} of pairwise disjoint non-parallel essential annuli in a handlebody of genus n (≥ 3), $|\mathcal{A}| \leq 4n - 5$, and the bound is best possible.

This is a joint work with Jingyan Tang.