

On classifications of links up to C_n -moves

(絡み目の C_n -move による分類について)

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Abstract: A C_n -move ($n \in \mathbb{N}$) is a local move on links defined by Habiro, which can be regarded as a ‘higher order crossing change’. The C_n -equivalence is an equivalence relation on links generated by C_n -move. The C_m -equivalence implies the C_n -equivalence for $m > n$. So the C_n -classification, which is the classification up to C_n -equivalence, of links becomes finer as n increases. The C_2 -classification of links and the C_3 -classification of links with 2 or 3 components, or of algebraically split links are known. Here we give several classifications of certain sets of links by using Milnor invariants.