

# CONFIGURATION SPACE OF INTERVALS WITH PARTIALLY SUMMABLE LABELS

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A configuration space of intervals in  $\mathbb{R}^1$  with partially summable labels is constructed. It is a kind of an extension of the configuration space with partially summable labels constructed by the second author and at the same time a generalization of the configuration space of intervals with labels in a based space constructed by the first author. An approximation theorem of the preceding configuration space is generalized to our case. When partially summable labels are given by a partial abelian monoid  $M$ , we prove that it is weakly homotopy equivalent to the space of based loops on the classifying space of  $M$  under some assumptions. This is joint work with Kazuhisa Shimakawa.