

Relative version of fillable complex and Whitehead products in moment-angle complex

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In toric topology, there are two important spaces associated with a simplicial complex K . One is the moment-angle complex denoted by \mathcal{Z}_K , and the other is the Davis-Januszkiewicz space denoted by \mathcal{DJ}_K . They are extended as polyhedral products. Recently, in case when K is totally fillable, Iriye-Kishimoto showed that the map $\mathcal{Z}_K \rightarrow \mathcal{DJ}_K$ can be divided into a wedge of iterated Whitehead products up to homotopy. In this talk, we consider relative version of totally fillable complex and extend their results a little.