

# DECOMPOSING REAL MOMENT-ANGLE COMPLEXES

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I will talk about the decomposition of the real moment-angle complex of a simplicial complex whose Alexander dual is sequentially Cohen-Macaulay over  $\mathbb{Z}$  (a homological generalization of a shellable complex). There are two ingredients in the decomposing method; one is an explicit description of the natural stratification of a real moment-angle complex by using the embedding of a simplicial complex into a cube due to Buchstaber and Panov, and the other is a combinatorial-homotopical property of sequentially Cohen-Macaulay complexes over  $\mathbb{Z}$ . This decomposing method generalizes to more general polyhedral products. This is joint work with Kouyemon Iriye.

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