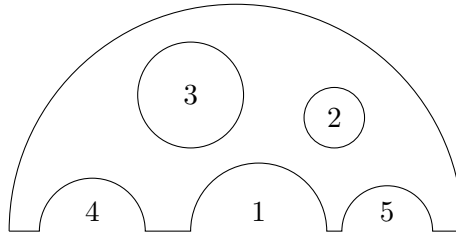


A Swiss cheese construction for operads

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The *Swiss cheese operad* was introduced by Voronov in [5]. It is a two-coloured topological operad described in terms of non-overlapping configurations of little disks inside the unit disk or, as in the picture below, non-overlapping little disks and little half disks inside the unit half disk:



The operadic composition is given by plugging disks or half disks.

In [3], Dolgushev, Tamarkin and Tsygan constructed an operad homotopy equivalent to the Swiss cheese operad. They deduced from this equivalence a proof of the Swiss cheese version of the Deligne conjecture formulated by Kontsevich [4]. In this talk, we will present the results of [2], where we extended the construction of [3] to higher dimensions, using the Baez-Dolan plus construction [1].

References

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