

## **Tractability using periodized generalized Faure sequences**

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In this talk, we present a construction called "periodized generalized Faure sequences". Unlike generalized Faure sequences, this construction is extensible in the dimension and lends itself well to high-dimensional problems. We consider a weighted space of functions for which this construction is particularly well suited and we use it to prove tractability in that space. This space of functions is a special case of one in which we have "finite-order weights", which were studied recently by several authors. We compare our findings with these previously obtained results and provide numerical results to illustrate the practical potential of our approach.