A comprehensive tutorial on quasi-Monte Carlo methods

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You might have heard of quasi-Monte Carlo methods to tackle high-dimensional integrals. You might have heard of optimal algorithms, the curse of dimensionality, information complexity and beyond. But what do you do when you are face to face with such a high-dimensional beast?

I will quickly review some concepts of information-based complexity to frame our setting. Immediately after we dive into the practical question of when to apply which method and how to massage your problem into a suitable form. After all, seeing is believing.