

Conference Pathwise Stochastic Analysis and Applications

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## **Iterated sums**

I will present the algebraic framework of iterated sums and how it relates to machine learning. Summing, instead of integrating, allows for changing the base field to a commutative semiring. This puts us close to optimization in semiring-weighted graphs, a classical topic in computer science. I will also discuss current generalizations in a noncommutative setting.

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