



Contribution ID: 425

Type: **Talk**

An update on the status of NSPT computations

Friday, 27 June 2014 16:50 (20 minutes)

In recent years Numerical Stochastic Perturbation Theory (NSPT) has proven to be a viable tool to perform perturbative computation at high order on the lattice. Despite final results are equivalent to standard Feynman diagrams the approach is rather different and allows a numerical implementation similar to usual (nonperturbative) MonteCarlo.

I will discuss final results for the computation of renormalization constants of quark bilinears for the regularizations defined by $nf=2$ Wilson fermions/tree level Symanzik improved gauge and $nf=4$ Wilson fermions/Iwasaki improved gauge. NSPT results will be compared with the ones coming from non perturbative determinations. I will also discuss current developments in the context of clover fermions.

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Session Classification: Standard model parameters and renormalization

Track Classification: Standard Model Parameters and Renormalization