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## **New heavy flavor contributions to DIS at $O(\alpha_s^3)$ : contributions from diagrams with 2 different masses and results on nested topologies**

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### **Summary**

We present recent results on the heavy flavor Wilson coefficients of the deep-inelastic structure function  $F_2$  stemming from diagrams which contain both charm- and bottom-quarks. Starting at 3-loop order these contributions cannot be incorporated into the variable flavor number scheme (VFSN). We also present new results on the computation of diagrams of more advanced topologies (knotted ladder, Benz, and others) which have been obtained via the method of hyperlogarithms. They require extensions to the basic formalism leading to the more general class of generalized hyperlogarithms, resp. the associated nested sums. Both the  $x$ - and Mellin  $N$ -space representations are discussed.

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