

Heavy quark fragmentation

List of useful references (with no claim to be exhaustive)

- First studies on charm fragmentation, with early phenomenological models [1, 2, 3, 4, 5]
- Perturbative fragmentation function formalism [6, 7]
- Soft resummation at NLL [8, 9]
- Phenomenological analysis at NLO+NLL level [10]
- Soft gluon resummation in massless and massive schemes [11, 12, 13, 14]
- Interplay of perturbative and non-perturbative physics:
 - heavy quark effective theory [15, 16]
 - renormalons [17, 18]
 - effective strong coupling [8, 19, 20]
 - soft and collinear effective theory and boosted heavy quark effective theory [21]
- Coefficient functions for $e^+e^- \rightarrow h + X$ at NNLO [22, 23, 24, 25]
- Initial conditions at NNLO [26, 27]
- Fragmentation functions at NNLO+NNLL [28, 29, 30, 31]
- Timelike DGLAP splitting kernels at NNLO [32, 33, 34]
- Public code with timelike DGLAP evolution in Mellin space [35]
- Improved description of charm ratio with heavy-quark thresholds effects in the resummed coefficient function [36]
- Non-universality of charm fragmentation e.g. [37]. Possible solution: data-driven approach with p_T -dependent hadron production fraction [38, 39].
- Transverse momentum dependent heavy quark fragmentation functions [40, 41, 42]
- Fits of beauty and charm fragmentation functions without perturbative component at NLO [43, 44, 45] and NNLO [46, 47]

References

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