

# Generator event

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## The structure of an event

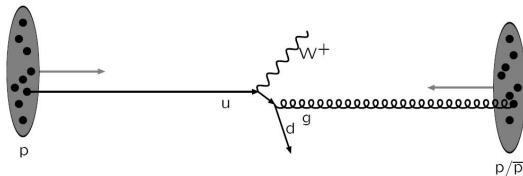
Warning: schematic only, everything simplified, nothing to scale, ...



Incoming beams: parton densities

# Generator event

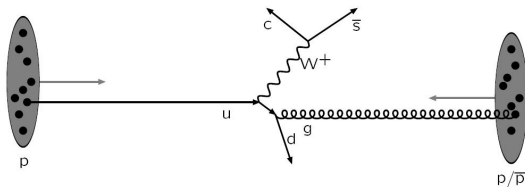
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Hard subprocess: described by matrix elements

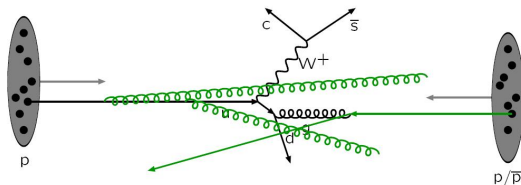
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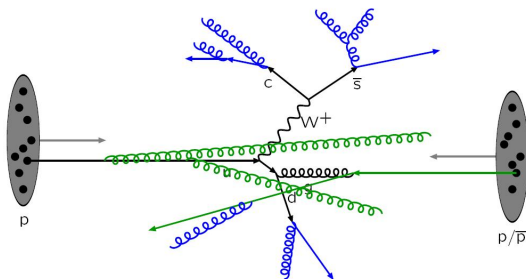
Resonance decays: correlated with hard subprocess

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Initial-state radiation: spacelike parton showers

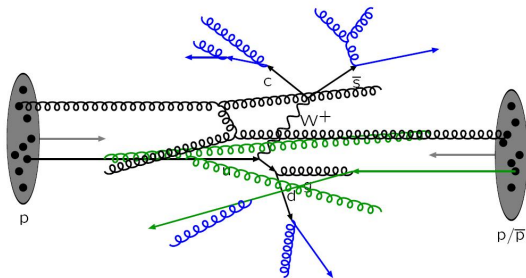
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Final-state radiation: timelike parton showers

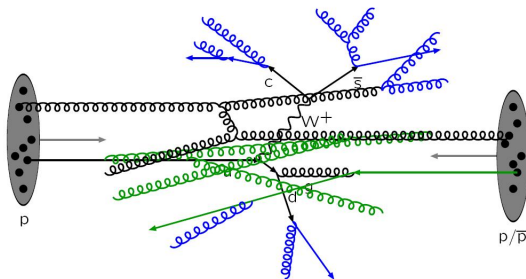
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Multiple parton-parton interactions ...

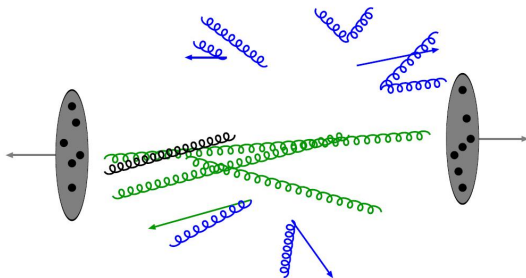
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... with its **initial**- and **final**-state radiation

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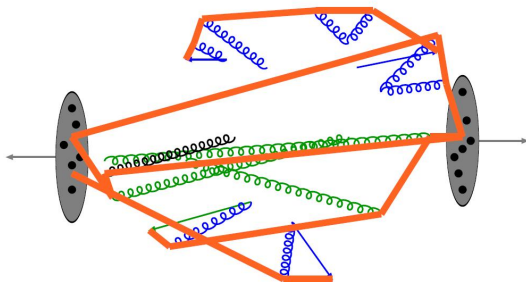


Beam remnants and other outgoing partons



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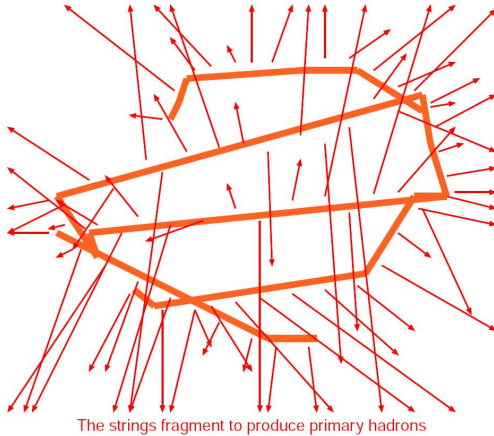
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Everything is connected by colour confinement strings  
Recall! Not to scale: strings are of hadronic widths

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