

**Perturbative QCD**

**Non-perturbative**

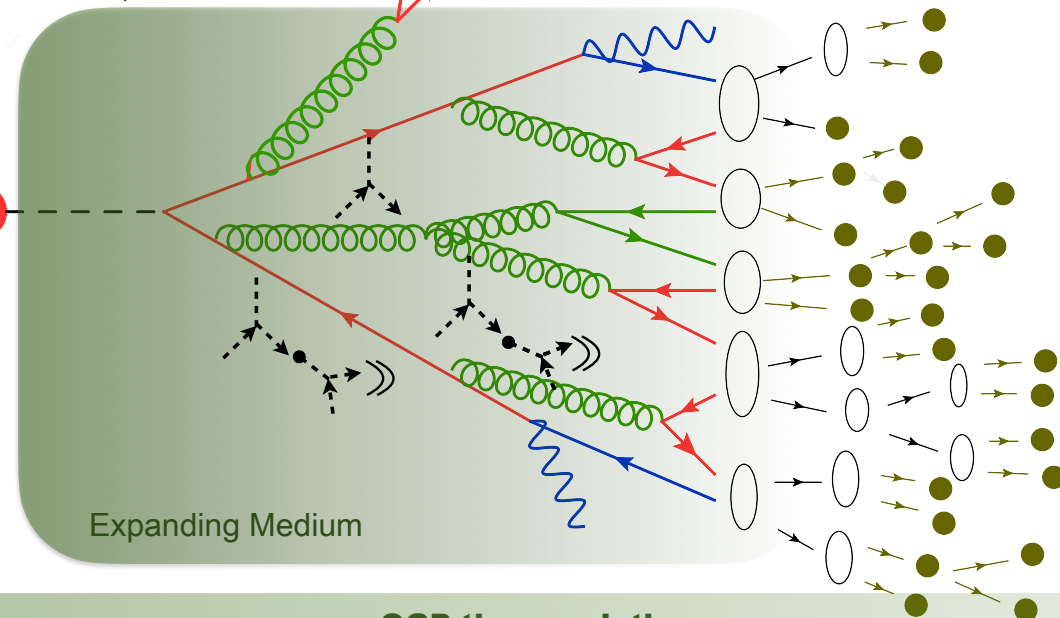
**QCD Momentum Scales**

Hard  
Process

Medium-induced  
radiation

jet-induced  
medium  
response

Thermalisation:  
Quark-Gluon  
Plasma



$$Q^2 \equiv \mathcal{O}(100^2 \text{GeV}^2 \sim 1 \text{TeV}^2)$$

$$Q^2 \equiv \mathcal{O}(1 \text{GeV}^2)$$

**Dense QCD**

**QGP time-evolution**

**Dilute (vacuum) QCD**