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### **Jet Physics in Heavy Ion Collisions**

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Jet studies in heavy ion collisions have been rapidly evolving since the first observations of medium interactions at RHIC through back to back hadron correlations and at LHC via reconstructed jets. In order to completely characterize the final state via jet-medium interactions and distinguish between competing energy loss mechanisms, complementary and robust jet observables are investigated. In this talk, with an emphasis on experimental results from LHC, we will discuss the latest developments of jet finding techniques and their applications on new jet structure observables in heavy ion environments. These new measurements could be used to differentiate whether the medium affects the jet formation process from the hard process through hadronization, or whether the parton loses energy to the medium with the showers only affected at much later stages.