

# An overview of the b-Tagging algorithms in the CMS Offline software

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The CMS offline software contains a widespread set of algorithms to identify jets originating from the weak decay of b-quarks. Different physical properties of b-hadron decays like lifetime information, secondary vertices and soft leptons are exploited. The variety of selection algorithms range from simple and robust ones, suitable for early data-taking and online environments such as the trigger system, to highly discriminating ones, exploiting all the information available. For the latter, a generic discriminator computing framework has been developed that allows to exploit the full power of multi-variate analysis techniques in a flexible way.

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