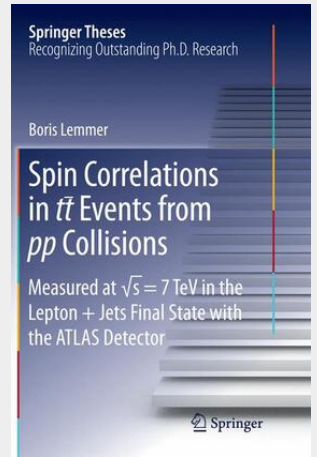


Lemmer

Spin Correlations in $t\bar{t}$ Events from pp Collisions

Measured at $\sqrt{s} = 7$ TeV in the Lepton+Jets Final State with the ATLAS Detector

This thesis introduces readers to the Standard Model, the top quark and its properties, before explaining the concept of spin correlation measurement. The first measurement of top quark spin correlations at the LHC in the lepton+jets decay channel is presented. As the heaviest elementary particle, the top quark plays an essential role in the Standard Model of elementary particle physics. In the case of top quarks being produced in pairs at hadron colliders, the Standard Model predicts their spins to be correlated. The degree of correlation depends on both the production mechanism and properties of the top quark. Any deviation from the Standard Model prediction can be an indicator for new physics phenomena. The thesis employs an advanced top quark reconstruction algorithm including dedicated identification of the up- and down-type quarks from the W boson decay.



106,99 €

99,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9783319369891

Medium: Buch

ISBN: 978-3-319-36989-1

Verlag: Springer International Publishing

Erscheinungstermin: 15.10.2016

Sprache(n): Englisch

Auflage: Softcover Nachdruck of the original 1. Auflage 2015

Serie: Springer Theses

Produktform: Kartoniert

Gewicht: 3985 g

Seiten: 233

Format (B x H): 155 x 235 mm

