

**DEUTSCHES ELEKTRONEN-SYNCHROTRON**  
Ein Forschungszentrum der Helmholtz-Gemeinschaft



DESY 14-120  
arXiv:1407.5821  
July 2014

**Conventional versus  
Single-Ladder-Splitting Contributions  
to Double Parton Scattering Production of  
Two Quarkonia, Two Higgs Bosons and  $c\bar{c}c\bar{c}$**

J. R. Gaunt

*Deutsches Elektronen-Synchrotron DESY, Hamburg*

R. Maciuła

*Institute of Nuclear Physics PAN, Cracow, Poland*

A. Szczurek

*Institute of Nuclear Physics PAN, Cracow, Poland*

*and*

*University of Rzeszów, Rzeszów, Poland*

ISSN 0418-9833

**NOTKESTRASSE 85 - 22607 HAMBURG**