The 29th International Workshop on Weak Interactions and Neutrinos



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Measurements of electroweak diboson production in association with two jets in ATLAS

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Measurements of diboson production in association with two additional jets probe the quartic interactions between electroweak vector bosons predicted in the Standard Model. In this talk, recent results from the ATLAS Experiment are presented. The measurement of the production of electroweak same-sign W boson pairs in association with two jets, as well as the electroweak production of a Zy pair and a pair of Z bosons will be presented. These measurements also include differential cross section measurements of the purely electroweak, as well as mixed strong-electroweak VVjj production. In addition, the observation of the electroweak production of two W bosons with opposite electric charge is reported. The differential measurements are used to set limits on dimension-8 effective field theory operators that modify the quartic electroweak couplings.

Presenter: WU, Yusheng (University of Science and Technology of China) **Session Classification:** Parallel talks 4: Electroweak Interactions