



LHC Seminar

SPEAKER: Vuko Brigljevic (Institute Rudjer Boskovic (HR))

TITLE: **Measurements of Gauge Boson Self-Interactions at CMS**

DATE: Tue 30/04/2013 11:00

PLACE: Council Chamber

ABSTRACT

A critical prediction of the Standard Model electroweak theory is the existence of triple and quartic gauge-boson self-interactions. The 2010-12 LHC run has resulted in a wealth of data in this sector, which can now be probed in many different production modes, both ordinary and potentially anomalous, with a sensitivity that is world-leading.

In this seminar, recent CMS results are presented for: measurements of diboson production, with associated constraints on triple gauge boson couplings; the first LHC measurement of purely electroweak production of a Z with two forward jets; and two-photon production of W pairs, with the first LHC constraints on quartic gauge couplings.