



Contribution ID: 165

Type: **Oral presentation**

## **PHENIX $W$ to $\mu$ measurements in polarized proton-proton collisions**

*Tuesday, 29 April 2014 09:50 (20 minutes)*

The Parity violation of the weak interaction allows to use real  $W$  production in polarized proton-proton collisions as a tool to select

both helicity and flavor of the participating quarks and antiquarks.

With  $W^+$  production one is mostly sensitive to  $u$  and  $d\bar{q}$  quarks while  $W^-$  production selects  $d$  and  $u\bar{q}$  quarks. The PHENIX experiment at RHIC has been taking data over the past several years at center of mass energies of around 500 GeV to measure  $W$  single spin asymmetries in the inclusive decays into muons at forward rapidities. The latest results will be presented.

**Primary author:** Dr SEIDL, Ralf (RIKEN)

**Presenter:** Dr SEIDL, Ralf (RIKEN)

**Session Classification:** WG6: Spin Physics

**Track Classification:** WG6: Spin Physics