

Measurement of OZI rule violation and spin alignments in $\phi(1020)$ and $\omega(782)$ production at COMPASS

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The COMPASS collaboration at CERN dedicated the 2008 and 2009 run time to hadron spectroscopy measurements with emphasis on the mesonic sector. At 190 GeV/ c beam momentum, both diffractive and double-diffractive production mechanisms overlap. Studying vector meson production allows to explore this relatively unknown transition domain. We present results on the ratio of production yields for $pp \rightarrow pp\phi(1020)$ and $pp \rightarrow pp\omega(782)$ and its x_F and t' dependence where we find an OZI rule violation in the order of a factor of 3. In addition, the spin alignment of $\omega(782)$ and $\phi(1020)$ as a function of x_F is investigated.

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