



Beitrag ID: 96

Typ: nicht angegeben

## The rho-pi puzzle and vector glueball mixing

*Freitag, 27. September 2024 11:45 (20 Minuten)*

The  $\Psi(2S)$  is identified as the radial excitation of the  $J/\Psi$ . Based on perturbative QCD, the branching ratio of the  $\Psi(2S)$  into some final hadron state should be approximately 12% of the branching ratio of the  $J/\Psi$  to that same hadron final state. This is called the “12% rule”. However, certain decay channels such as the  $\rho\pi$  severely violate this 12% rule. Using the extended Linear Sigma Model, we study the effect a small mixing angle between the  $\Psi(2S)$  and the vector glueball can have on the 12% rule.

**Hauptautoren:** VEREIJKEN, Arthur (Jan Kochanowski University); GIACOSA, Francesco (Frankfurt University)

**Vortragende(r):** VEREIJKEN, Arthur (Jan Kochanowski University)

**Sitzung Einordnung:** Session