

# $\phi$ and $\omega - \rho$ production in d-C, d-U, S-U and PbPb at SPS energies

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$\phi$  and  $\omega - \rho$  production have been measured by the NA50 experiment through the dimuon channel [1,2] in various systems ranging from p-W to Pb-Pb, and as a function of the centrality of the collision.

Results from the last Pb-Pb measurement performed in 2000 are presented, together with earlier d-C, d-U and S-U measurements, where d-C and d-U bring a complementary estimate of the  $\phi$  and  $\omega - \rho$  alpha parameter performed by previous experiments [4]. The observed behaviour in ion induced collisions is very different from the one observed with light projectiles.

The study is performed in transverse mass ( $M_T$ ) domains, where the  $\phi/(\omega + \rho)$  ratio is the most closely related to the strangeness saturation factor  $\gamma_s$ .

Updated values of  $\phi$  multiplicity vs.  $M_T$ , using new branching ratios from the Particle Data Group, are determined and compared to other experiments, partially solving the so called "phi puzzle" [5].

## References

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