

# Color Transparency in Incoherent Electroproduction of $\rho$ Mesons off Nuclei.

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## Summary

Color transparency (CT) phenomena in elastic electroproduction of vector mesons off nuclei are usually infected by the onset of coherence length (CL) effects. We analyze the problem of CT-CL separation at different energies and find that at low CLAS energies at Jefferson Lab (JLab), one can study practically the net CT effects, since

CL is much shorter than the nuclear radius. We investigate various manifestations of CT effects using rigorous quantum mechanical approach based on the path integral technique. Motivated by the last data from the CLAS experiment at JLab, we predict the  $A$ ,  $Q^2$  and  $l_c$  dependence of nuclear transparency for  $\rho$  mesons produced incoherently off nuclei.

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