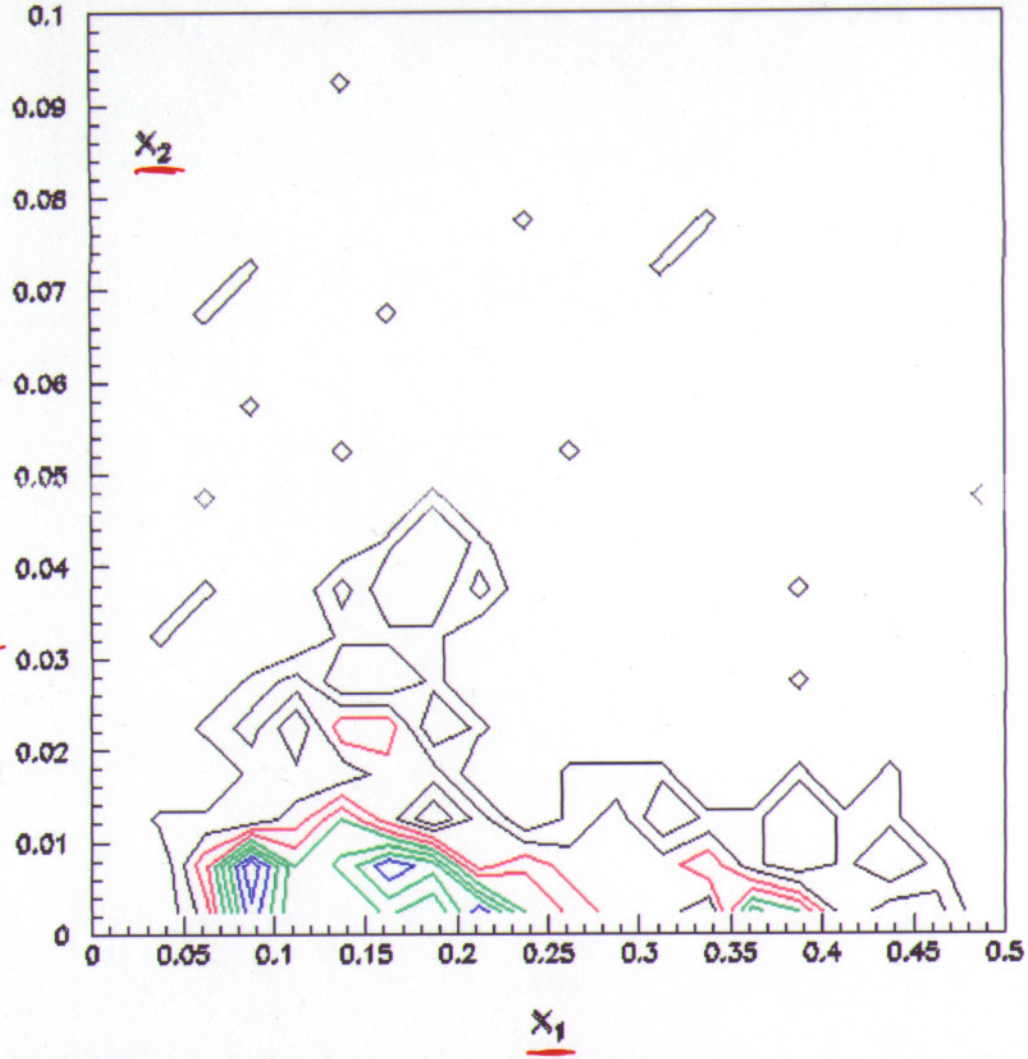
Gluon shadowing via single muons

pA with A toward endcap, no shadowing

→ Ap, nuclear dependence measurement possible

pA + Ap average would cancel acceptance differences, parton momenta + muon origin are undetermined



$p_{T\mu} > 2$ GeV

	$\langle x_1 \rangle$	$\langle x_2 \rangle$	$R_{g/A}$
c	0.22	0.016	0.63
b	0.24	0.048	0.70

$$R_{g/A} = \frac{g_A(x)}{A g_N(x)}$$

x_1-x_2 correlation in charm production cut on single muons detected in the PHENIX south arm. One gluon below threshold for shadowing and one above. By studying p-A, A-p, two muon arms, nuclear dependence, shadowing factor can be determined.