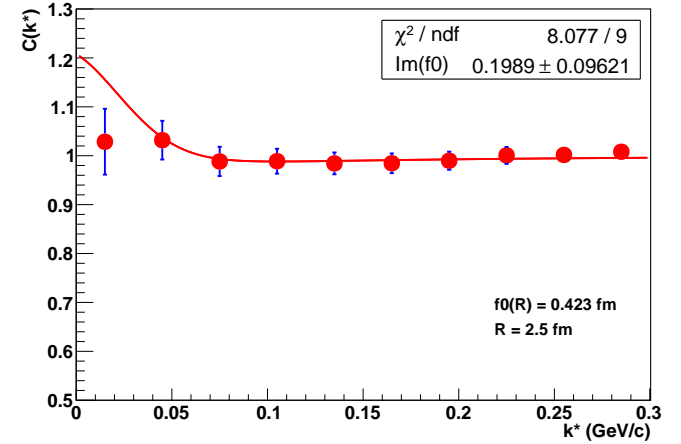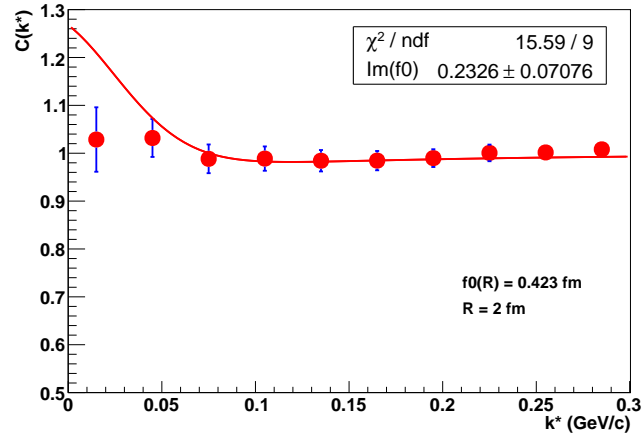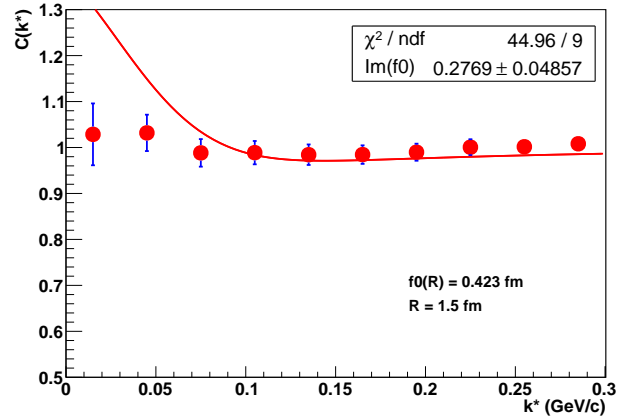# Example of fits with LL model, fixed f_0 using Torres-Rincon model
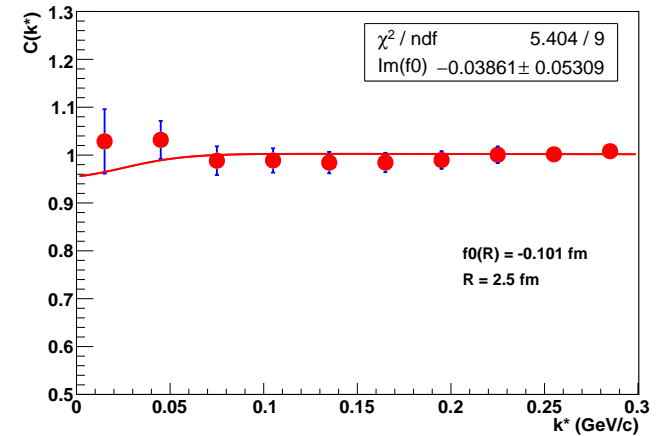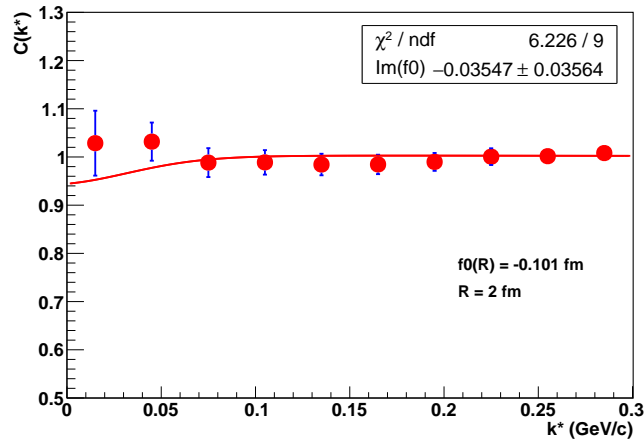
I = 1/2, f_0 = 0.423 fm

χ^2 / ndf	44.96 / 9
Im(f0)	0.2769 ± 0.04857

f0(R) = 0.423 fm
R = 1.5 fm

χ^2 / ndf	15.59 / 9
Im(f0)	0.2326 ± 0.07076

f0(R) = 0.423 fm
R = 2 fm

χ^2 / ndf	8.077 / 9
Im(f0)	0.1989 ± 0.09621

f0(R) = 0.423 fm
R = 2.5 fm

I = 3/2, f_0 = -0.101 fm

$C(k^*)$ for D^0-π

χ^2 / ndf	8.051 / 9
Im(f0)	-0.0366 ± 0.02118

f0(R) = -0.101 fm
R = 1.5 fm

χ^2 / ndf	6.226 / 9
Im(f0)	-0.03547 ± 0.03564

f0(R) = -0.101 fm
R = 2 fm

χ^2 / ndf	5.404 / 9
Im(f0)	-0.03861 ± 0.05309

f0(R) = -0.101 fm
R = 2.5 fm
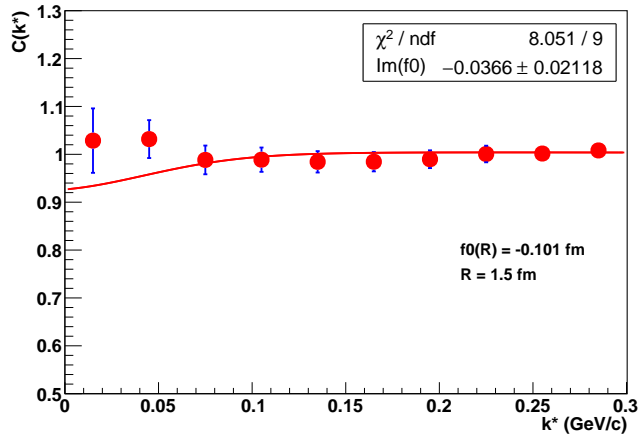
Re(f_0) = 0.423 fm
Torres-Rincon (I = 1/2)

D^0-π

R (fm)	Chi2/NDF
0.5	3359/9
1	218/9
1.5	44.96/9
2	15.59/9
2.5	8.077/9
3	5.688/9
3.5	4.788/9
4	4.387/9
4.5	4.183/9
5	4.072/9
5.5	4.013/9
6	3.983/9
6.5	3.97/9
7	3.968/9
7.5	3.972/9
8	3.977/9
8.5	3.984/9
9	3.991/9
9.5	4.009/9
10	4.014/9

Chi2/NDF vs R
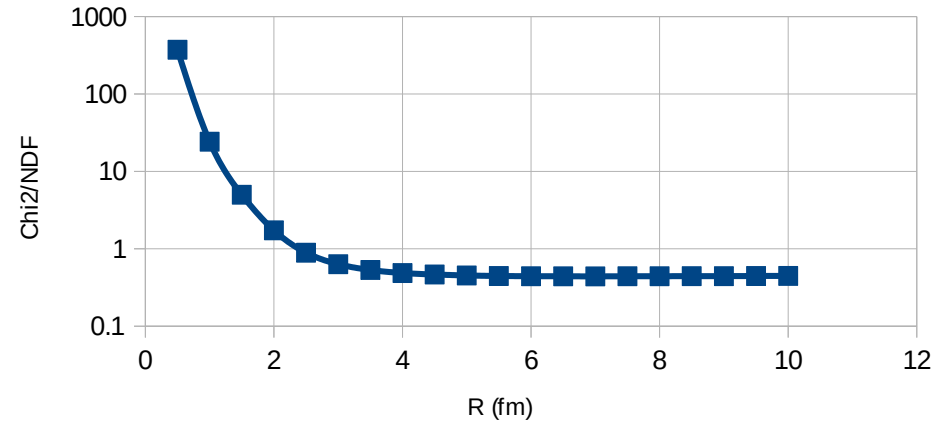
Probability vs R
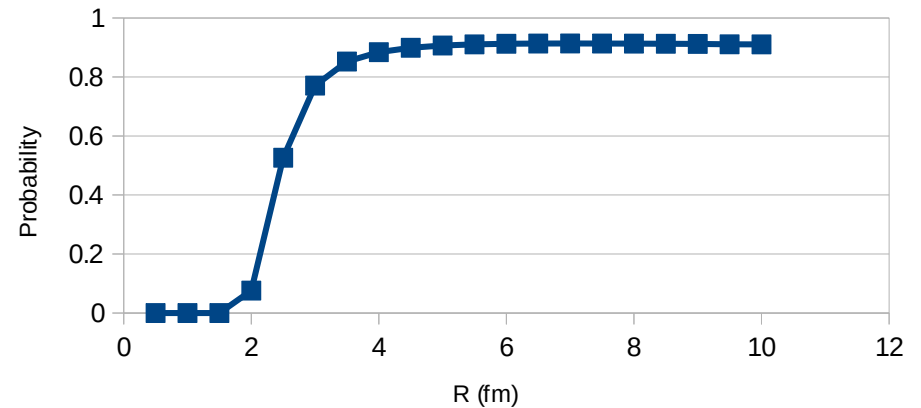
Source size can't be lower than 2 fm
(further checks are ongoing to see in detail
the X^2 values in the range of R = 1.5 – 2 fm)

Current data can't pin down the exact higher limit of source size (R),
maximum R could be equivalent to the fireball size at freezeout