

Update on measurement of Bose-Einstein Correlations



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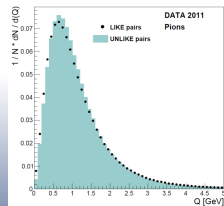
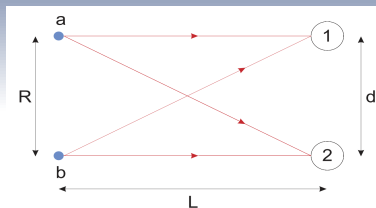
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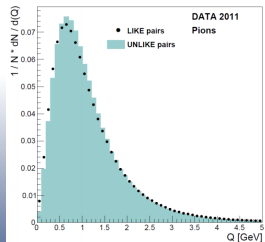
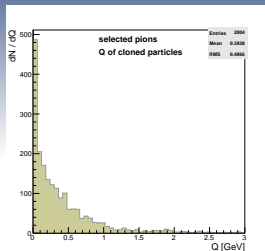
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- HBT interferometry can be used to study the diameters of source.
- For indistinguishable particles the phenomena is known as Bose-Einstein Correlations (BE).
- BEC correlations occur as enhancement of same particles in the low Q region.
- We already observed the effects.



- Systematics are starting to be access.
- For clones pollution we first looked at MC11 MC.
- Obtained rates are:
 - 1 pions: $(0.319 \pm 0.023)\%$
 - 2 kaons: $(0.023 \pm 0.015)\%$
 - 3 kaons: $(0.055 \pm 0.021)\%$
- Effect clearly different then BEC.
- Will repeat with 2012 MC.



Fraction of clones:

- Using data we tried to verify the Coulomb effect in our sample.
- Using unlike pairs from the same and different PV.
- Effect is visible but small \rightarrow small systematics.

