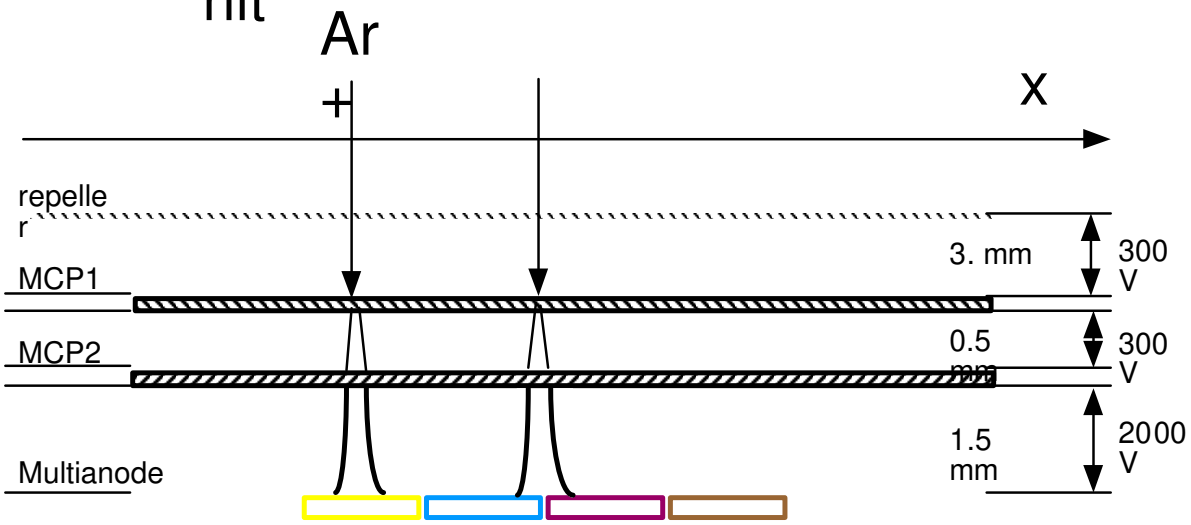
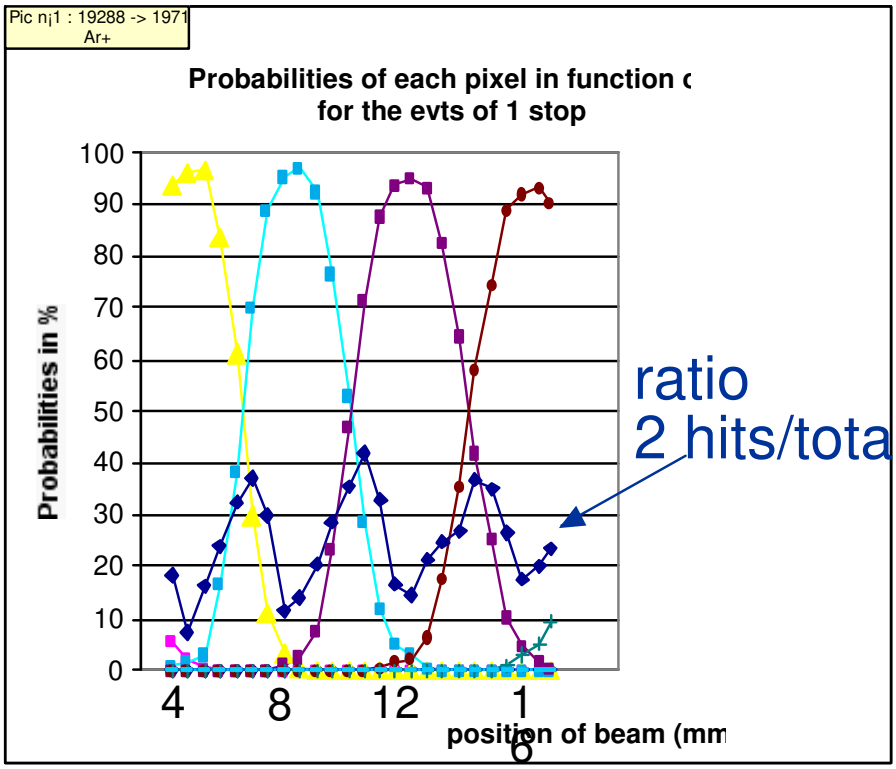
The double hit ratio

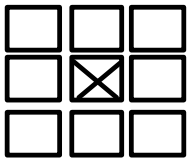
aim: 1 particule = 1 hit

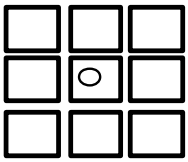


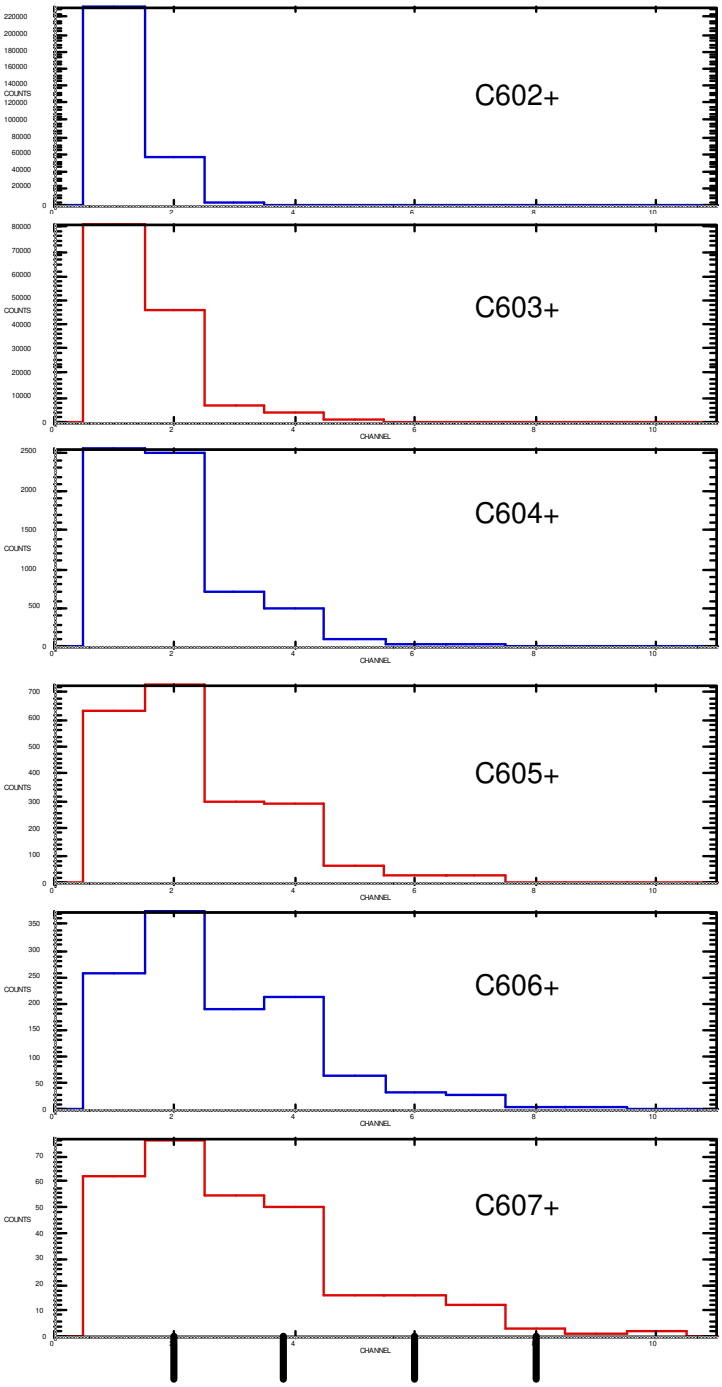


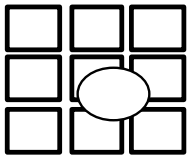
of multicharged fullerene

number of nearest neighbouring pixel hitted

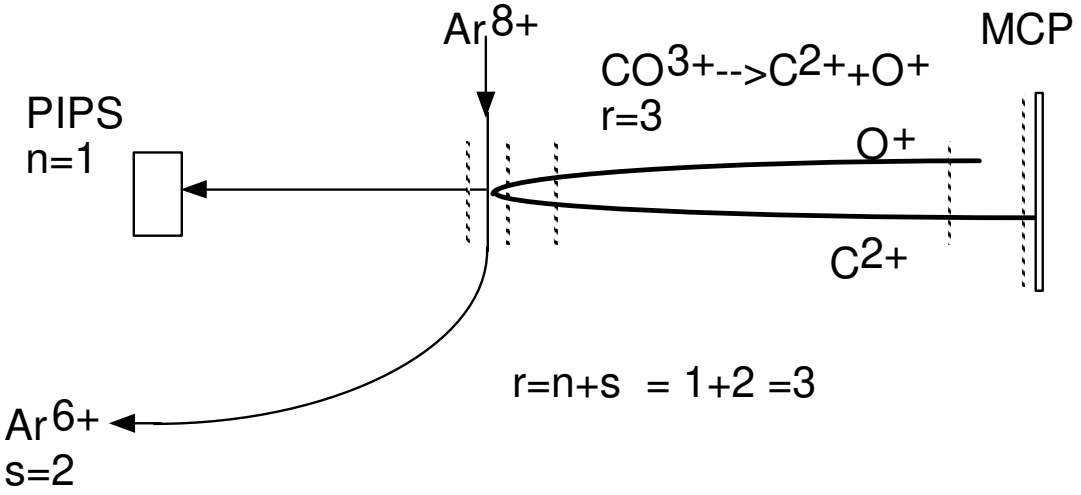


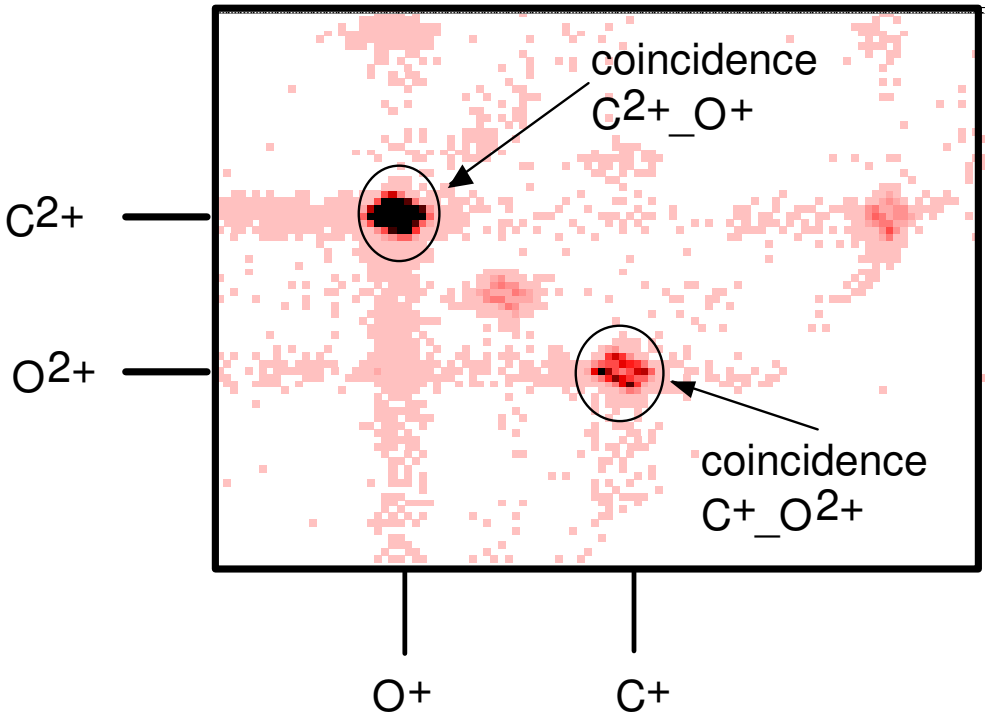






Measurement of detection efficiency (ex: $CO^{3+}\text{-->}C^{2+}+O^{+}$)



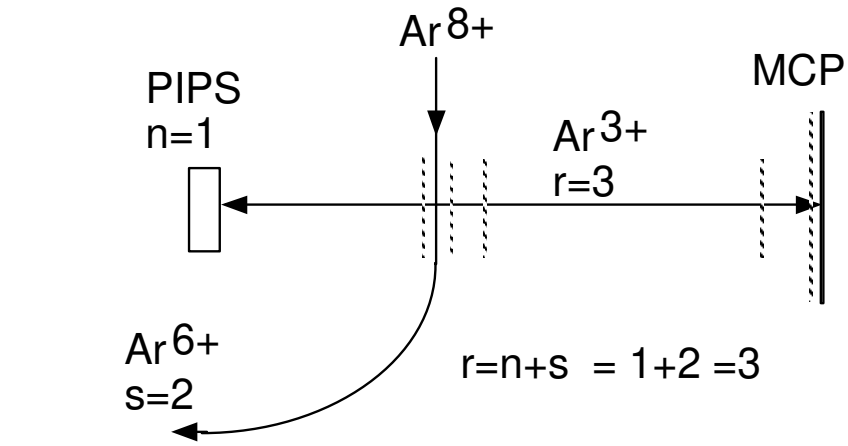


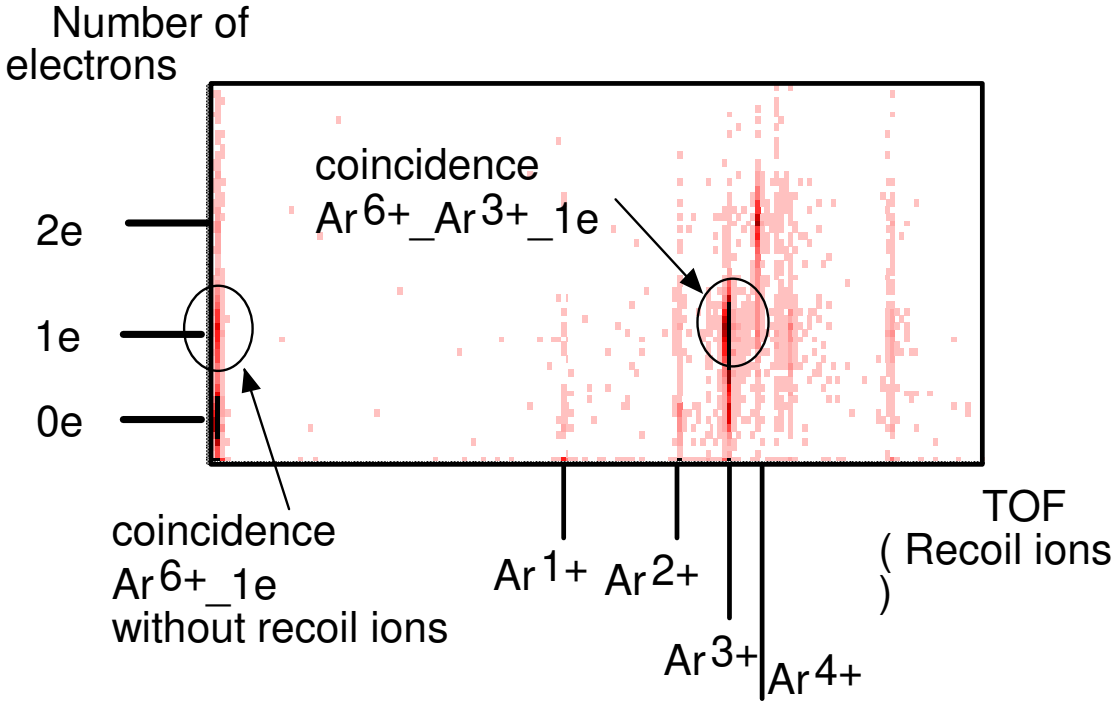
4 partenaires: Ar6+, 1e, C2+, O+
Coincidences between Ar6+ 1e and C2+ (without O+)= N triple
Coincidences between Ar6+ , 1e, C2+ et O+ = N quadruple

Efficiency of coll. detec. of O+ =
Nquadruple/(Nquadruple+Ntriple)

Efficiency of O^{+} - 80% + of C^{2+}=85%

Measurement of detection efficiency (ex: Ar3+)





Coincidences between Ar6+ and 1 electron (without recoil ion)= N double
Coincidences between Ar6+ , 1 electron, et Ar3+ = N triple

Efficiency of collection and detection = Ntriple / (Ntriple+Ndouble)
efficiency of detection - 86%