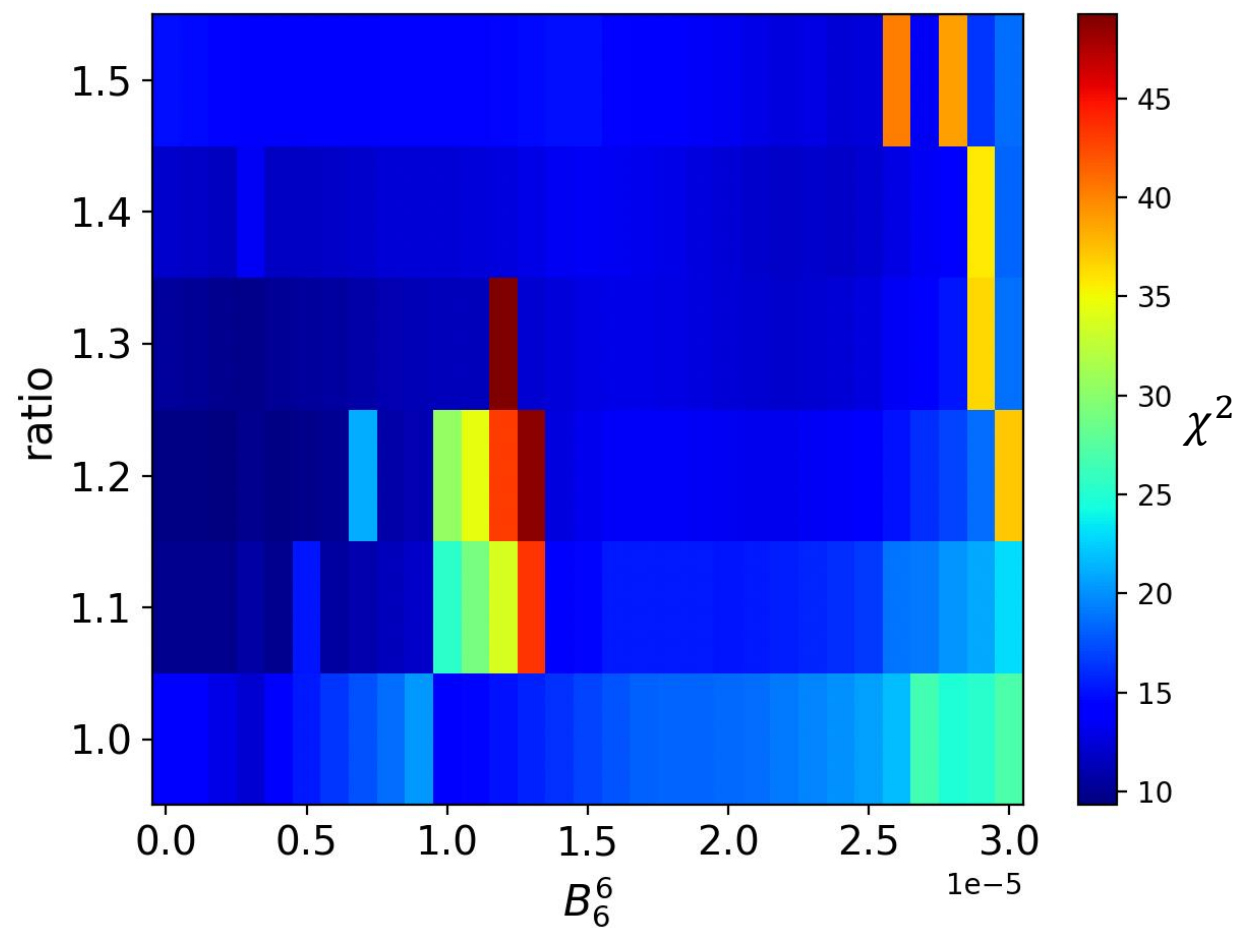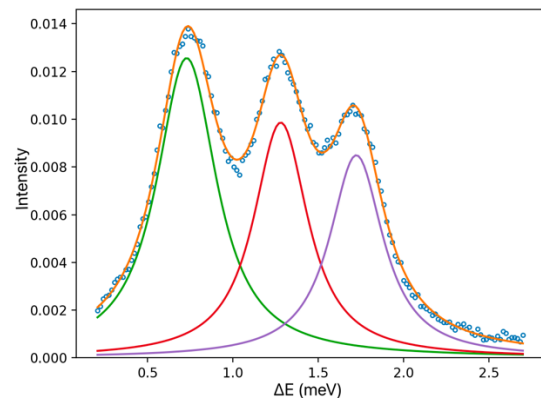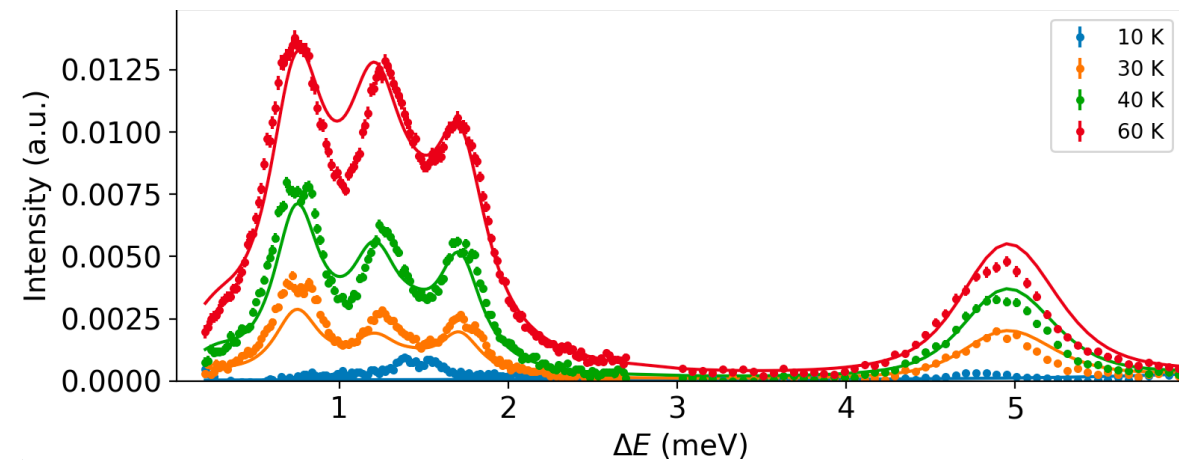Peak shape used for calculation
60 K as example:



Case I : $\chi^2 = 8.56$

Case II : $\chi^2 = 14.49$