

# Nuclear moment measurements???

Using the polariser line at TRIUMF for nuclear physics  
Plans and ideas

Matthew Pearson

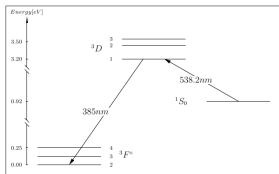
TRIUMF

June 3rd, 2009

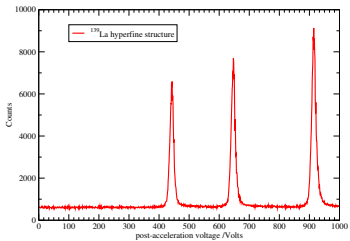
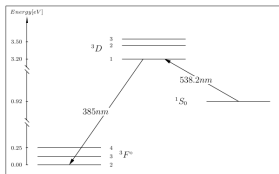
# Polariser line



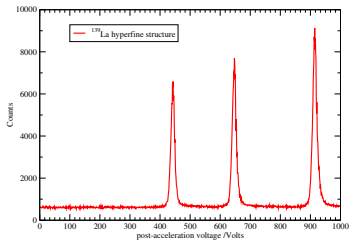
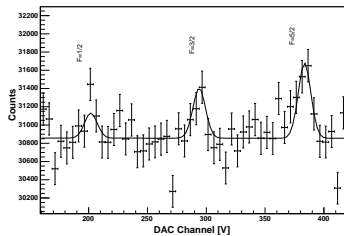
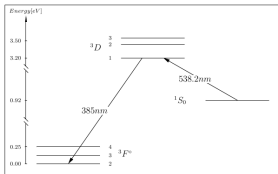
# Spectroscopy on $^{131,139}\text{La}$



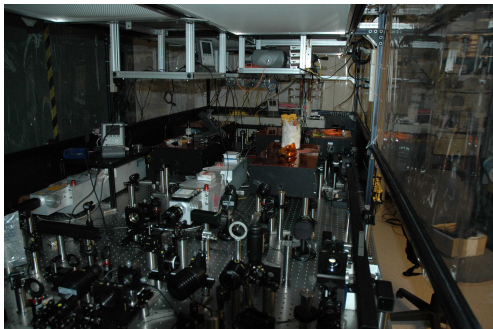
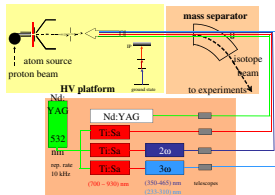
# Spectroscopy on $^{131,139}\text{La}$



# Spectroscopy on $^{131,139}\text{La}$



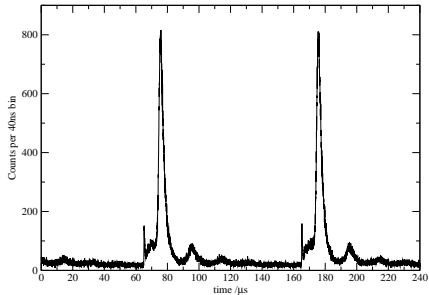
# Naturally pulsed beams



# Pulsed beams

naturally pulsed beams

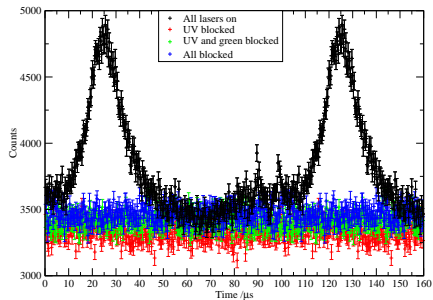
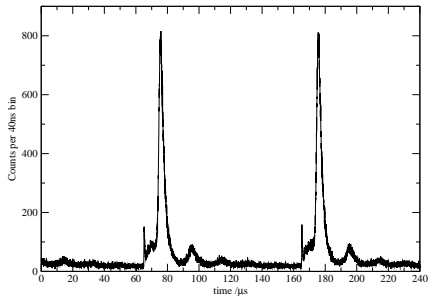
$^{11}\text{Be}$



# Pulsed beams

naturally pulsed beams

$^{11}\text{Be}$

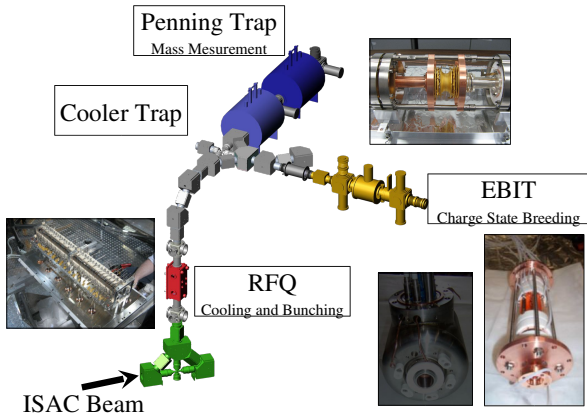


$^{112}\text{Ag}$



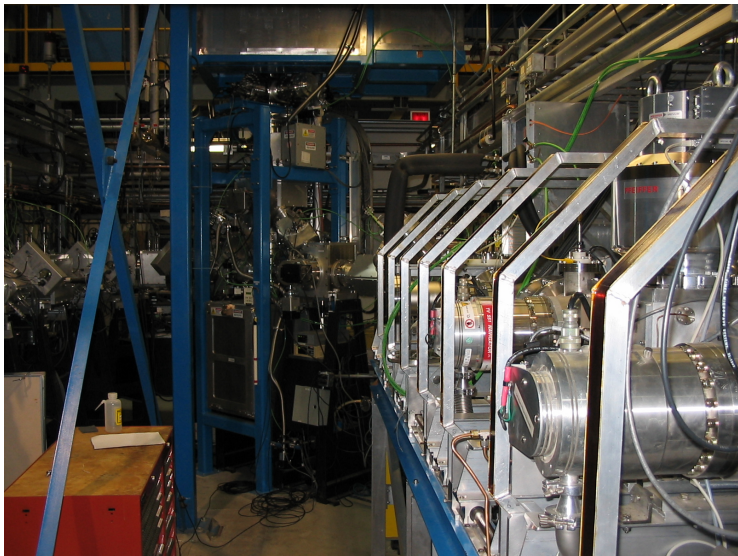
# TITAN RFQ

artificially pulsed beams

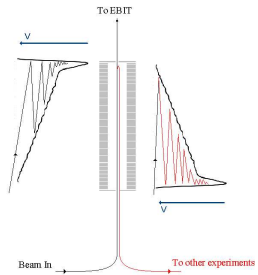


# TITAN RFQ

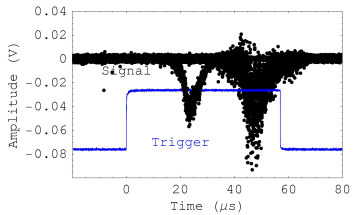
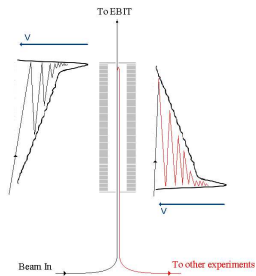
artificially pulsed beams



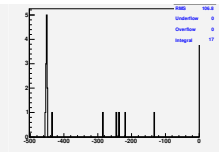
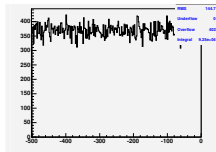
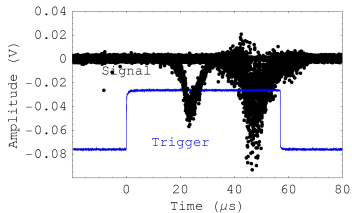
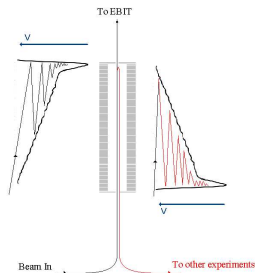
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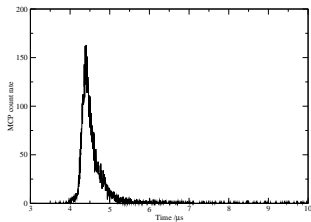
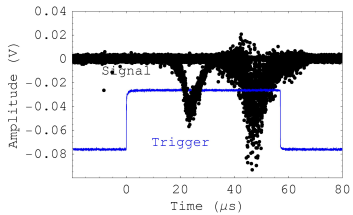
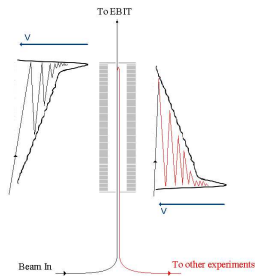
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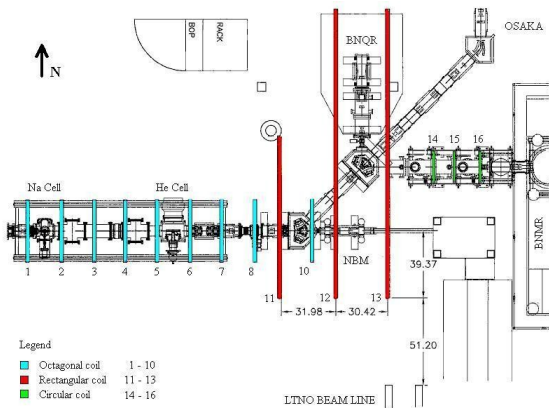
# TITAN RFQ

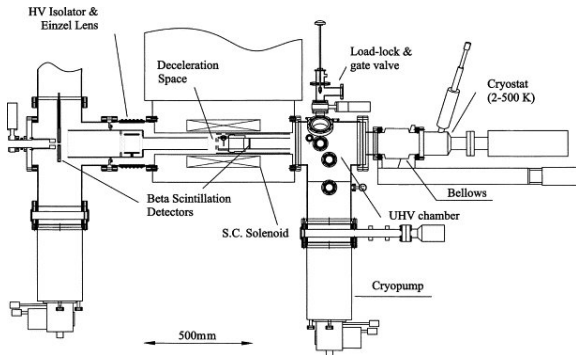


# TITAN RFQ

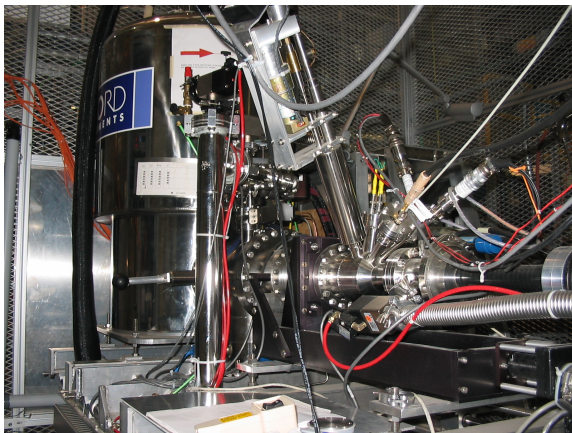


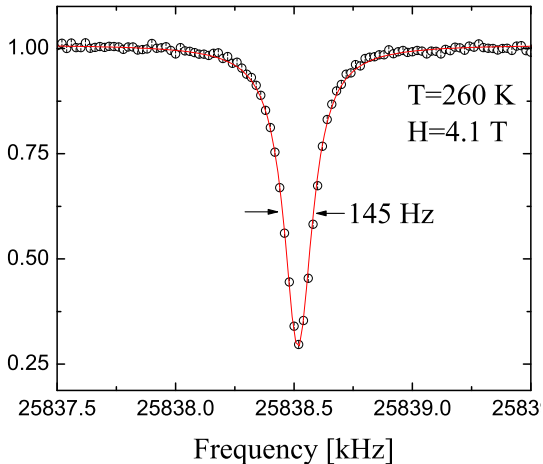
# Polarised beams

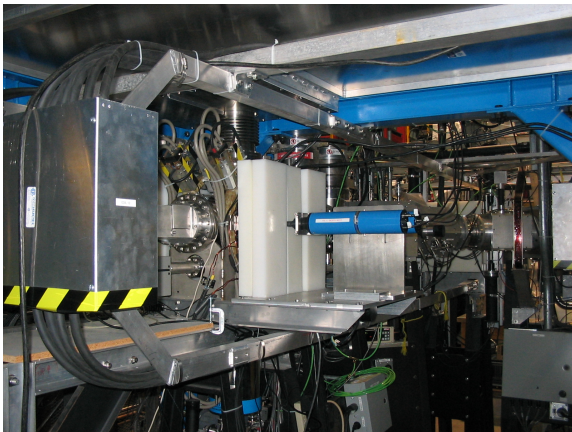


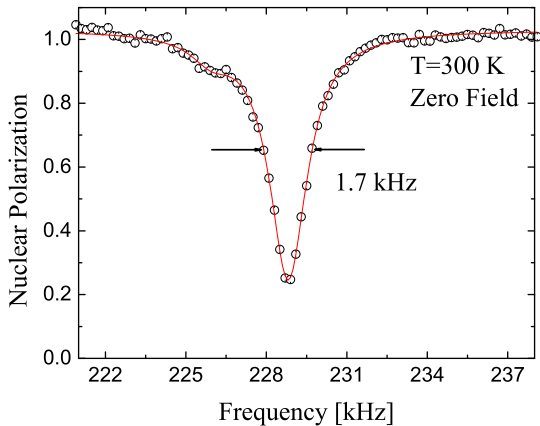






$^8\text{Li}$  in Ge



$^8\text{Li}$  in STO

- The polariser line at TRIUMF is surrounded by useful pieces of equipment
- Demonstrated pulsed operation using the TITAN RFQ  
Development of this to follow later this summer
- $\beta$ -NMR and  $\beta$ -NQR spectrometers are operational having been used for materials science for many years.  
This will be used to measure nuclear moments later in the summer