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## Low-energy crystal-field excitations observed using inelastic Neutron Scattering

The time-of-flight spectrometer, PELICAN, at ANSTO operates two choppers which provide a fixed initial energy of neutrons to the sample. Configuring the instrument to a wavelength of  $4.75\text{\AA}$ , sets this initial neutron energy to  $3.6\text{meV}$ . By phasing the choppers, however, harmonic wavelengths can be obtained such as  $\lambda/2$ , etc. By measuring a powder sample of  $\text{ErNiAl}_4$  at  $\lambda/2$  ( $\lambda=4.75\text{\AA}$ ) we could observe a greater range of positive energy transfers (to the sample) and, after appropriate background removal, confirm the presence of an excitation at  $7\text{meV}$ . This excitation represents the emission from the crystal field level at  $7\text{meV}$  to  $0\text{meV}$  confirming the result obtained in a previous experiment.

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