



	<b>Experiment title:</b> Iron Phonon Density of States and Fermi Surface Nesting in Strained Disordered FeRh Thin Films	<b>Experiment number:</b> HC 2762
<b>Beamline:</b>	<b>Date of experiment:</b> from: 1.11.2016 to: 8.11.2016	<b>Date of report:</b> 01.03.17
<b>Shifts:</b>	<b>Local contact(s):</b> Rudolf Ruffer, Sasha Chumakov	<i>Received at ESRF:</i>
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**Report:**

Because of difficulties with the elastic experiment (HC 2761), it was decided to use the time to switch to inelastic measurements of the same sample FeRh at room temperature. Our aim was to check the possible count rate despite the suboptimal ring mode (7/8 + 1). The first measurements have shown an iron partial density of vibrational states shown in the figure for the disordered FeRh sample (nonmagnetic at room temperature). Although the noise level of this makes an exact analysis difficult, this result is now being used to compare with results for ordered FeRh in the antiferro- and ferromagnetic states.

