

## Pressure-induced transitions using <sup>57</sup>Fe, <sup>119</sup>Sn, <sup>151</sup>Eu and <sup>161</sup>Dy Nuclear Resonant Scattering

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Nuclear resonant scattering (NRS) is a powerful tool to study pressure-induced magnetism and lattice dynamics under extreme pressure conditions. At 3-ID and 30-ID beamlines, NRS experiments in 5 isotopes (<sup>57</sup>Fe, <sup>83</sup>Kr, <sup>151</sup>Eu, <sup>119</sup>Sn, and <sup>161</sup>Dy) are performed routinely. In this poster examples of NRS applications are presented in a few systems, including magnetic transitions in Fe<sub>3</sub>S<sub>4</sub> (greigite), Eu and Dy metal under pressure as high as 141 GPa, and pressure-induced armorphization in SnI<sub>4</sub>.