

FIG. 1: Temperature evolution of integrated intensity measured on (0.5, 0.5, 0.5) and (0, 0, 2) reflections of URhIn<sub>5</sub> single crystal using PANDA spectrometer. The power-law fit of magnetic reflection is presented.  $T_{fit}$  represents the fitted temperature range. Dashed line is given as guide to the eye.



FIG. 2: Temperature evolution of integrated intensity measured on (-0.5, 1.5, -1), (0.5, 2.5, 1.0) and (-2, 0, 0) reflections of  $U_2$ RhIn<sub>8</sub> single crystal using D10 spectrometer. The power-law fit of magnetic reflection is presented.  $T_{fit}$  represents the fitted temperature range. Dashed line is given as guide to the eye.



FIG. 3: Magnetic structure of  $\text{URhIn}_5$  (left) and  $\text{U}_2\text{RhIn}_8$  (right) is shown. Only magnetic ions are displayed in the figure with directions of magnetic moments. The origin of the  $\text{U}_2\text{RhIn}_8$  is shifted by (0.5, 0.5, 0) for better visibility of the magnetic moments within the nuclear unit cell.