

Dimensional reduction and incommensurate dynamic correlations in the $S = \frac{1}{2}$ triangular-lattice antiferromagnet $\text{Ca}_3\text{ReO}_5\text{Cl}_2$ (Supplementary Information)

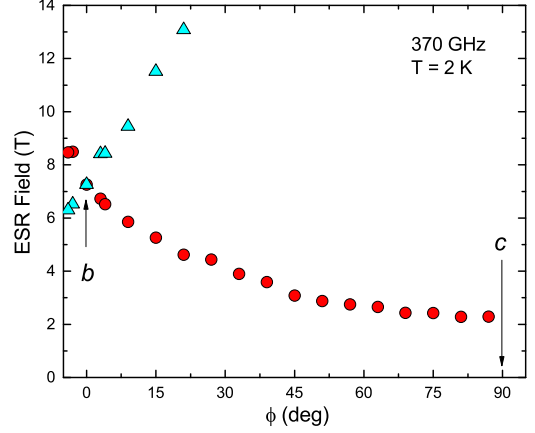
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For high-field electron-spin resonance (ESR) experiments single crystals with typical sizes of ca $4 \times 4 \times 1 \text{ mm}^3$ (along the a , b , and c axis, respectively) were used. In Supplementary Figure 1 we show the angular dependence of ESR absorptions for magnetic field applied in the bc plane at a frequency of 370 GHz. The measurement were performed at a temperature of 2 K, clear indicating a large anisotropy of ESR absorption, in particular in the vicinity of the b axis. As revealed, even a small (a few degree) tilting of magnetic field from the b axis results in a significant ESR line splitting. Based on that, we estimate the accuracy of sample orientation in our experiments (Fig. 2 - 4) to be better than ± 5 degree. The anisotropy of the observed ESR absorption in the vicinity of the c axis is not as pronounced. The mode C1 was observed with magnetic field of about 2 T applied along the c direction, while much higher field is needed for the observation of the mode C2' at this frequency.



Supplementary Figure 1. ESR angular dependence for magnetic field in the bc plane at a frequency of 370 GHz ($T = 2$ K). Two observed modes are denoted by different colors.

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