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## Neutron scattering of the easy-plane magnet ErB<sub>2</sub>

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We present neutron scattering data on the hexagonal rare-earth diboride ErB<sub>2</sub>. ErB<sub>2</sub> orders magnetically below  $T_c = 14$  K, where the magnetocrystalline anisotropy shows strong easy-plane characteristics, as established from measurements of the specific heat, ac susceptibility, magnetisation and electrical transport.

In order to investigate the magnetic structure we performed single-crystal neutron diffraction in zero and finite field as a function of temperature. We have also performed inelastic neutron scattering measurements, parts of which were done with the artificial intelligence assisted data collection strategy, ARIANE.

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