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Potential new vortex phase in antiferromagnetic incommensurate magnet $\text{Ba}_2\text{CuGe}_2\text{O}_7$

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The existence of a vortex phase with non-trivial topological properties in an antiferromagnetic incommensurate magnet $\text{Ba}_2\text{CuGe}_2\text{O}_7$ has been verified, by means of neutron scattering and bulk measurements of specific heat and AC susceptibility. Despite lacking evidence of any signature of a phase transition in the bulk magnetisation and specific heat measurements, hints towards the presence of a vortex phase were found in the neutron scattering data.

Primary authors: Mr DEMBSKI-VILLALTA, Michał (Heinz Maier-Leibnitz Zentrum (MLZ), Technische Universität München, D-85748 Garching, Germany); Prof. GARST, Markus (Institute of Theoretical Solid State Physics, Karlsruhe Institute of Technology, 76049 Karlsruhe, Germany); Dr WOLBA, Benjamin (Institute of Theoretical Solid State Physics, Karlsruhe Institute of Technology, 76049 Karlsruhe, Germany); Dr RESSOUCHE, Eric (Université Grenoble Alpes, CEA, IRIG, MEM, MDN, 38000 Grenoble, France); Dr TURRINI, Alexandra (Laboratory for Neutron Scattering and Imaging (LNS), Paul Scherrer Institut (PSI), CH-5232 Villigen, Switzerland); Mr ENGELHARDT, Alexander (Physikdepartment E51, Technische Universität München, D-85748 Garching, Germany); Dr MÜHLBAUER, Sebastian (Heinz Maier-Leibnitz Zentrum (MLZ), Technische Universität München, D-85748 Garching, Germany)

Presenter: Mr DEMBSKI-VILLALTA, Michał (Heinz Maier-Leibnitz Zentrum (MLZ), Technische Universität München, D-85748 Garching, Germany)

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