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# Altermagnetism: a perspective from symmetry

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## Résumé

Altermagnets are collinear compensated magnets whose band structures have a characteristically anisotropic pattern of spin splitting in momentum space. They have attracted the interest of people especially in spintronics for various attractive properties combining features of simple ferromagnets and antiferromagnets. In this talk I introduce altermagnetism through the symmetry properties of these systems. In particular, as they are most cleanly defined in the zero spin-orbit coupled limit, we formulate a Landau theory that captures their residual spin-space symmetries and that allows us to perform a complete classification of possible altermagnets and their properties.

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