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**Spin glasses: Still frustrating after all these years?**

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Spin glasses are archetypal model systems to study the effects of frustration and disorder. Despite ongoing research spanning several decades, there remain many fundamental open questions, such as the existence of a spin-glass state in a field or the low-temperature structure of phase space for short-range systems. Novel applications across disciplines, as well as progress in algorithms and the advent of fast and cost-effective computers, have recently revived interest in the study of spin glasses. First, an overview of spin glasses will be given, followed by recent novel applications to fields as diverse as structural glasses and quantum computing.