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Almeida Thouless Line in Vector Spin Glasses¹ AUDITYA SHARMA, A. P. YOUNG, University of California Santa Cruz — The de Almeida Thouless line in the magnetic field-temperature plane of spin glasses, separates a high-temperature, high-field paramagnetic phase from a spin glass phase. It is a characteristic feature of Ising spin glasses in the mean field (infinite-range) limit. Here we show that an AT line also occurs for infinite-range *vector* spin glasses in a *random* magnetic field, which does not appear to have been appreciated before. We verify this conclusion by numerical simulations.

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