

Abstract Submitted
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New classification of magnets VLADIMIR ANTROPOV, Condensed Matter Theory, Ames Laboratory, Ames, IA, 50011 — Standard methods classify magnets using their magnetic long range order at $T=0$ (ferromagnets, antiferromagnets and so on). Some classifications can be created inside those groups as well. In addition, there is a very attractive and widely used qualitative localized-itinerant picture, which, however, does not have any real criteria behind. I would like to introduce a rather universal and possible quantitative classification using the idea of magnetic short range order, which we recently found theoretically and which has been for years observed experimentally in many materials.

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