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Title:	Coupled spin-charge order in frustrated itinerant triangular magnets
Authors:	Ray, Rajyavardhan (/jspui/browse?type=author&value=Ray%2C+Rajyavardhan) Kumar, Sanjeev (/jspui/browse?type=author&value=Kumar%2C+Sanjeev)
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Abstract:	We uncover four spin-charge ordered ground states in the strong coupling limit of the Kondo lattice model on triangular geometry. The results are obtained using Monte Carlo simulations, with a classical treatment of localized moments. Two of the states at one-third electronic filling ($n = 1/3$) consist of decorated ferromagnetic chains coupled antiferromagnetically with the neighboring chains. The third magnetic ground state is noncollinear, consisting of antiferromagnetic chains separated by a pair of canted ferromagnetic chains. An even more unusual magnetic ground state, a variant of the 120° Yafet-Kittel phase, is discovered at $n = 2/3$. These magnetic orders are stabilized by opening a gap in the electronic spectrum: a "band effect." All the phases support modulations in the electronic charge density due to the presence of magnetically inequivalent sites. In particular, the charge ordering pattern found at $n = 2/3$ is observed in various triangular lattice systems, such as 2H-AgNiO_2 , 3R-AgNiO_2 , and Na_xCoO_2
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