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Lepton Flavour Violation in Models with A4 Flavour Symmetry.

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I discuss lepton flavour violating transitions, leptonic magnetic dipole moments (MDMs) and electric dipole moments (EDMs) in a class of models characterized by the flavour symmetry A4 x Z3 x U(1){FN}. I present the relevant low-energy effective Lagrangian where these effects are dominated by dimension six operators, suppressed by the scale M of new physics. All the flavour breaking effects are universally described by the vacuum expectation values <Phi> of a set of spurions. I separately analyze both a supersymmetric and a general case. While the observed discrepancy delta a_mu in the anomalous MDM of the muon suggests M of order of a few TeV, several data require M above 10 TeV, in particular the limit on EDM of the electron. In the general case also the present limit on BR(mu -> e gamma) requires M > 10 TeV, at least. The branching ratios for mu -> e gamma, tau -> mu gamma and tau -> e gamma are all expected to be of the same order. In the supersymmetric case the constraint from mu -> e gamma is softened and it can be satisfied by a smaller scale M. In this case both the observed delta a_mu and the current bound on BR(mu -> e gamma) can be satisfied, at the price of a rather small value for $|<Phi>|, of the order of a few percents, that reflects on a similar value for theta{13}.$

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