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It is well known that the classical Gauss reduction theory for 2 by 2 integer matrices can be interpreted in terms of properties of the geodesic flow on the modular surface with respect to a particularly chosen section. Moreover various classical “arithmetic” codes correspond to the choice of different sections. It is tempting to try to find a fruitful higher-dimensional analogy for all of those. Dynamical ingredients are present: the Weyl Chamber flow and appropriate sections. The problem is the absence of natural lattice structure on the sections. It is likely that no reasonable lattice structure exists at all. On the other hand, the dynamical properties of the Weyl chamber flow are reasonably well understood and, if anything, they are better than those of geodesic flow. In this talk I will discuss both positive and negative aspects of the problem (Received February 03, 2009)