

Animating the Deformation of Lattices

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Grids and lattices are an intuitive object that many can explore. The ways they can smoothly deform make interesting animations, that link to linear algebra. In particular a periodic hyperbolic transformation of a lattice makes a lovely looping animation. Understanding the details of this loop gives a surprising connection to continued fractions. Shifting to the moduli space of lattices (itself a powerful example) gives more potential for animation of flow along geodesics. This talk discusses the work in a planned series of videos the first of which is complete:

<https://www.youtube.com/watch?v=vLrliPt4Uc0>