Chip-firing Models
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Abstract: Chip-firing models were originally studied in the context of self-organized criticality and sandpile models, as balancing games on graphs, and for their algebraic structure. More recently, chip-firing has appeared in a surprising variety of new connections. For example, chip firing plays a central role in a Riemann-Roch theorem for graph, linear systems in tropical geometry and energy minimization. After an overview, I will discuss recent works extending aspects of the theory to more general state spaces and to higher dimensions.