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Thomas A McConville* (thomasmcconvillea@gmail.com), 77 Massachusetts Ave, Cambridge, MA 02139, and **Pavel Galashin, Sam Hopkins** and **Alexander Postnikov**. *Root system chip-firing*.

We introduce a variation on the classical chip-firing game called the vector-firing process. The chip-firing game, also known as the Abelian Sandpile Model, is a famous example of a confluent system. That is, given an initial configuration of chips on a graph, there may be many ways to "play" the game, but the ending configuration of chips does not depend on the choices made. Recently, Jim Propp introduced labeled chip-firing on a line, which exhibits partial confluence in the sense that it is confluent from some initial configurations but not for others. With an aim to generalize and explain the partial confluence of the labeled chip-firing game, we introduce the vector-firing process on points in a real vector space. In this talk, I will define this process, focusing on the root system case, and present several results and conjectures on the confluence of these systems. This is based on joint work with Pavel Galashin, Sam Hopkins, and Alexander Postnikov. (Received September 25, 2017)