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Barbara F Csima*, Department of Pure Mathematics, University of Waterloo, Waterloo, Ontario N2L 3G1, Canada. *Understanding Frameworks for Priority Arguments in Computability Theory.*

Priority Arguments are a common proof technique used in Computability Theory. A theorem is broken down to being equivalent to a list of requirements. These requirements are given a priority order, and a strategy is devised to meet all the requirements, making use of the priority order.

Those who know a Computability Theorist know that we love our priority arguments! In this talk, we will discuss why Computability Theory lends itself so well to this proof technique, and discuss at a high level the types of strategies used in priority arguments.

As soon as one first learns of priority arguments, one asks, can we save repeating ourselves, and have a framework for this? In this talk, we will discuss, again at a high level, existing frameworks for priority arguments, with a particular focus on Ash's α -systems and Montalban's η -systems. We discuss the general idea of how the frameworks work, their power, and their limitations. (Received September 14, 2020)