Initial Reference Class

by Sven Nilsen, 2020

An Initial Reference Class is a system where an observer is among many other similar observers, where all observers are initialized at the same time to the same initial state.

An Initial Reference Class is closely related to a Flat Reference Class[1]. For example, one can have an Initial Reference Class with a single observer, which is the same as a Flat Reference Class.

An Initial Reference Class is used to talk about the system response of an initial burst of observers. Since an Initial Reference Class might be used as a building block for other reference classes, the focus is more on mathematical transforms than the interpretation of the reference class for observers.

An *infinite* Initial Reference Class has infinite number of observers. This might be thought of as a limit. One can model this for distributions using the Dirac Delta Function[2].

References:

[1] “Flat Reference Class”
Sven Nilsen, 2019
https://github.com/advancedresearch/observer_selection_effects/blob/master/papers-wip/flat-reference-class.pdf

[2] “Dirac delta function”
Wikipedia
https://en.wikipedia.org/wiki/Dirac_delta_function