The Arrow Paradox

http://lowres-picturecabinet.com.s3-eu-west-1.amazonaws.com/39/main/2/14336.jpg

Version 1

1. If the arrow moves throughout the period of its flight, then it is moves at each instant of that period.

2. The arrow occupies a space equal to its own volume at each instant.

3. If the arrow occupies a space equal to its own volume at an instant, then it is not in motion at that instant.

4. The arrow is not in motion at any instant of that period. (from 2-3)

5. The arrow does not move throughout the period of its flight. (from 4)

Version 2

1. If the arrow moves throughout the period of its flight, then, when it moves, it moves in the present.

2. The arrow is not in motion in the present.

3. The arrow does not move throughout the period of its flight.

The Static Account of Motion

An object is in motion throughout a period if and only if the object occupies different positions at every instant of that period; it is in motion at an instant if and only if it occupies a different position at instants immediately before and after that instant.