

# Explosions

23<sup>rd</sup> September 2012

© 2012 Jim Adams

## Abstract.

In [Ad13b] we introduced the subject of chromotopical algebra, which is the homotopy theory of branched spaces [Ad13a] and an extension of homotopical algebra. To consider the equivalent of a branched real line we introduced the idea of an explosion.

Concomitant with this development, in another paper [Ad13c] we introduced the idea of ladder numbers, which do not possess the well ordering property. In consequence, and under the model of ladder numbers presented there, a number of basic theorems for real numbers fail for ladder numbers.

In that paper we mentioned that an application of ladder numbers is a circumvention of the ‘Eilenberg swindle’ in algebraic K theory. Since generalisations of  $K_0$  are developed in the homotopy theory of Quillen and others, and this is a proper subset of chromotopical algebra, it is germane to ask: what is the extension of K theory to explosion analysis? This is the objective of our paper.

We discuss here the concepts of globalisation, multiple globalisation for  $n > 2$  (where we are dealing with an  $n$ -branched space) and reconnections of explosions, including explosive reconnections.

## References.

- Ad13a      J.H. Adams, *The concept of branched spaces I*, 2013  
Ad13b      J.H. Adams, *The concept of branched spaces II*, 2013  
Ad13c      J.H. Adams, *Archimedean infinitesimals in ladder analysis*, 2013