

# Rest Frame as an Artificial Construct

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**The existence of the Rest Frame is often assumed to be a natural cosmological phenomenon. We contest that its physical properties and locality do not fit with any known or hypothesized physical system. The inconsistencies in the reactions to energy dissipation within Absolute Rest make an artificial construct a much more likely scenario than any natural explanations that have been currently put forward.**

## I. INTRODUCTION

The existence and properties of the Rest Frame (or Absolute Rest) have been demonstrated and quantified many times over [1]. However, further study, exploration, and shared knowledge from other species have given us new insights into the Rest Frame, and its FTL properties. Namely, that the energy dissipation phenomenon does not occur in all localities when synced with the Rest Frame. While this is conventionally referred to as “out of Rest Frame space” or, sometimes quite wrongly as “outside of the Rest Frame,” the frame of reference itself, the Rest Frame, exists in all places. This reality has led many leading physicists to speculate that the FTL properties are side-effects of an as-of-yet unknown form of matter outside the Standard Model (henceforth to be called exotic matter), which is distributed throughout space [2]. Another generally-accepted and known hypothesis is that of “tangled space,” that is, that the Universe, while being broadly saddle-shaped, is in fact constantly overlapping itself, and some as-of-yet unknown property of reference frames allows one to cut a hole through space to another point when in a particular frame of reference [3]. We will explain why these two, and any other logical explanations or the FTL properties of the Rest Frame are not self-consistent (consistency with general physics will also be demonstrated, but privileged reference frames and FTL lack consistency with general physics).

## II. EXISTING HYPOTHESIS

### A. Exotic Matter

First, let us deal with the idea of the FTL properties of the Rest Frame stemming from properties of exotic matter. The largest problem with this hypothesis is the distribution of said exotic matter. Given the matter and dark matter distributions of the galaxy, we can create a map of galactic mass with respect to radial distance. If this exotic matter were to interact with normal matter gravitationally, the pattern of the percent of space which is FTL-traversable via the Rest Frame with respect to radial distance should appropriately match up. This, however, is not the case. In fact, the most densely traversable section of the galaxy is about 20,000 light-years from the galactic core [4]. Matter distribution, on the other hand, falls

out as a measure of radial distance, with dark matter spiking further out to form a halo of dark matter [5].

Barring regular gravitational interaction with normal matter, there is no physical reason for exotic matter to remain tied to certain regions of the galaxy. By our measurement, systems and regions outside of the FTL capabilities of the Rest Frame have been outside it for millennia, and remain outside of it. If this exotic matter were not to interact with the galaxy gravitationally, these regions would pass in and out of FTL-traversable space. As this is also not the case, there seems to be no logical way exotic matter could be the cause.

### B. Tangled Space

The notion of tangled space is rather popular, given the more cemented idea of the Einstein-Rosen bridge, and the theoretical feasibility of such [6]. However, the energy concentrations and amounts used in FTL Rest Frame hops are considerably below the levels which would be theoretically required to create such a bridge, so this idea is commonly coupled with  $A$ , to explain away the energy discrepancies by a “magnifying effect” from the exotic matter [7]. Dark energy is sometimes also employed as a hand-waving explanation, given the absence of any mathematical or material proof [8].

This insistence on tangled, or warped, space runs into a critical flaw, however, when we consider that the amount of energy used above the FTL threshold (and concentrated within the measurement volume, typically  $\text{mm}^3$ , which, notably, is much larger than the required energy density for an Einstein-Rosen bridge, which deals with atomic-scale volumes). This energy is directly proportional to the length of the FTL “hop,” i.e. The higher the energy density, the further one travels instantaneously. An Einstein-Rosen Bridge would connect two regions of spacetime without consideration of the energy density, indeed, any excess would simply go to the stability of the bridge, or to no productive means.

Furthermore, there is the significance of directionality to consider. The FTL “hop” is always in the direction of the initial average velocity of the energy expenditure. Again, this violates the precepts of the Einstein-Rosen bridge, which would always link two distinct points in space based upon spacial geometry. Some have tried to explain this paradox by using “highly crumpled spacetime,” but this then fails to address the hop length issue [8]. The FTL hop itself may indeed be of an Einstein-Rosen bridge nature, but it is unlikely to be caused by any natural (or even artificial) crumpling or tangling of spacetime.

### III. EVIDENCE OF ARTIFICIAL NATURE

There are several strange qualities to the FTL properties of the Rest Frame (aside from FTL travel itself) that seem to hint to an artificial construct, rather than a natural phenomenon.

#### A. Excluded Systems and Space

Many parts of space simply exist outside of the FTL abilities of the Rest Frame. Most notably are the 5,000 light-years around the galactic core, and a 10,000 cubic light-year area of space within the Beta Quadrant of the galaxy. After that, there are many star systems that seem to also exist outside of FTL travel via the Rest Frame, even if the area covered (or not covered) is only a few light-years, this makes any kind of conventional travel to these star systems impossible. If the phenomenon were natural, one would expect it to pervade all space, or to have random (or semi-random) patches of uncovered space. However, these locations where FTL travel is not possible seem deliberately chosen. In particular, Observer patterns have been mapped to show that they spend by far the most time within the uncovered area in the Beta Quadrant.

#### B. Existence Outside the Milky Way

The FTL properties of the Rest Frame do not seem to exist outside of the Milky Way itself—not even extending to the several dwarf galaxies which orbit it. If this were a natural phenomenon, one would expect fallout as gravity or matter or energy falls out, however, it terminates much sooner than any of those criteria do.

#### C. Heavy Virtual Particle Creation

The Rest Frame, in areas where FTL travel is possible, spawns virtual pairs which are much more complicated than any seen in a natural environment. All observed (and calculated by the Standard Model) virtual pairs are sub-atomic in nature. The most common virtual pair created in an FTL area of the Rest Frame is a alpha particle and an anti-alpha particle. The only known place that particles this heavy and complicated have been synthesized from energy is in a lab, and even then they have never been synthesized through borrowing energy from the vacuum.

Even stranger, and more indicative of some incomprehensible technological feat rather than a natural process, is the occasional and rare creation of a single alpha particle without an anti-alpha counterpart. This simply does not follow from any known or predicted process in nature, and can seemingly only come from deliberate manufacture. This also means that the space in the FTL regions of the Rest Frame is constantly losing energy to matter creation, and this energy must be drawn from somewhere. Whatever artificial source is generating this FTL capability would have to be adding energy to space itself constantly to generate these effects, and likely a constant stream of energy would be required to help jump-start an Einstein-Rosen Bridge if that is indeed the methodology of FTL travel.

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