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THE THREE BODY PROBLEM

A JACA ENGINE

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Adrian & Cristina Nania

Incidental Connections

Why in the Heavens a propulsion engine would even be mentioned in a Three Body Problem discussion? I can give you a few reasons, already discussed in the JACA engine description.

- Pseudo-Chaotic Systems
- Absolute Speed
- Gravity and Isolated Systems
- Three Body Chimera

What About The Absolute Speed?

What is your absolute speed?

- You fly in an aircraft in a corkscrew path, your planet spins
- Your planet revolves around the Sun, your Galaxy spins
- Your Galaxy revolves and drifts in a corkscrew, in a cluster
- Your cluster revolves and drifts in a corkscrew, in a filament

Have you seen it yet? Most everything in our Universe is already moving very fast. Lewis Epstein & Hermann Minkowski:

Why can't you travel faster than light? The reason you can't go faster than the speed of light is that you can't go slower. There is only one speed [through spacetime]. Everything, including you, is always moving at the speed of light.

The Absolute Speed Matters

Your absolute speed is much higher than you thought, and it does not require you to do anything special, or your permission. The Universe gave you already a free ride ticket. And we do not even mention here the speed of the Universe expansion, already faster than light, they say. Why is that important?

- Most everything is already part of a larger and stable system
- A three body system is never “A three body” alone
- To upset this apple cart you need more than “nothing”
- You need to take into account that all 3 celestial bodies are already forced to move together:
 - In a corkscrew, in a corkscrew, in a corkscrew, ...
 - Independent of each other, on the same large scale orbit

In the grand scheme of things the three body problem is rather more like local bickering between three close family members. The Universe is gently guiding them into reconciliation.

It is not always easy to disturb fast moving celestial objects that are already in a stable, large orbit through the Universe

Pseudo-Chaotic Systems

Chaos is a very misunderstood concept, especially when talking about systems in space. While our Universe looks chaotic, in fact it is a very good example of a highly organized system with minimal “accidents”.

- Have you ever seen rogue celestial bodies? Maybe, if you look hard enough, you will see a few of them.
- Have you ever seen beautiful patterns in solar systems, galaxies, clusters, and filaments? That is the rule.

Do not assume our Universe is a chaotic system just because you do not see the trees through the thick forest.

Chaos Matters

Most everybody is fascinated with chaos, but is chaos that real, as we think it is?

- A three body planetary system is not really “chaotic”
- To upset this apple cart you need more than “nothing”

It is not always easy to disturb fast moving celestial objects that are already in a stable, large orbit through the Universe

Gravity and Isolated Systems

Is there such a thing as a truly Isolated System in our Universe? No, if you take Gravity into account: nothing can hide from Gravity.

- Gravity has no polarity, although it is a vectorial force
- Gravity permeates everything, isolated or not

Gravity Matters

There are no such things as “Isolated Systems” in our reality; that is simply a nonsense concept in physics. Yes, you hear them talking every day about isolated system in thermodynamics, mechanics, chemistry, and God knows what else, but they are all missing one part: Gravity.

- Most everything is already part of a stable system
- A three body planetary system is never “A three body”

It is not always easy to disturb fast moving celestial objects that are already in a stable, large orbit through the Universe