

# Plan

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## Abstract

What would you say if I tell you that there exists a decent probability for the total annihilation of Earth within couple of years? Because you don't know me personally you might shoot from the hip and say something like "Are you mad?", "Get real!", "Dream on" or something like that. Fair enough. Perhaps I should present my case and my action plan for you to judge.

## Entering the new world

Majority of people don't know what we about to experience. I'm not talking about global warming or similar phenomena threatening our more or less decent living conditions. Scientific advances in theoretical physics are delivering us into a totally new world.

In this new world we are facing the ultimate challenge, can our planet and mankind survive? And the result depends totally on our own actions. I'm talking about the new theoretical advances regarding the understanding of antimatter [1], its very nature and ideas how to utilize it. Mainstream physics is about to discover this new way of looking at matter and antimatter. Author has reasons to believe that at least two countries are going to conduct experiments based on these theoretical advances.

In short, there is no separate antiparticles per se. Every particle can act as its antiparticle, it all depends on how two same kind of particles are put together. With certain method, these two can annihilate each other. In normal conditions, those particles experience big enough repulsion which prevents the annihilation hence allow the existence of matter in large scale.

We can manipulate the conditions in such a manner that we can have those two particles aligned so that their spin vectors have an opposite signs and they are aligned head-on. While keeping this arrangement, we put those particle together and they will annihilate. **That's the headline!** What does it mean? There will be consequences.

## All the good

Obviously, there will be a lots of good consequences. Usage of antimatter as a source for energy production might be the greatest news. Antimatter can be used, if not as is, at least as a trigger for fusion chain reaction. Energy production innovations based on antimatter are only limited by our imagination.

Due to ultimate energy density, antimatter usage with space travels is the obvious choice. It is also possible to collect the fuel (e.g. hydrogen atoms) from space as the journey progresses. Naturally, new innovations are needed in order to harness antimatter usage into a propulsion purposes.

Destroying incoming objects from space is another nice target for antimatter technology. Conventional nuclear devices can't deliver enough energy into this kind of activity. Causing annihilation chain reaction within incoming object can be achieved with antimatter detonating device (a.k.a. antimatter bomb).

Reader can use his/her imagination and probably come up with numerous other areas for the technology.

## All the bad

Naturally, the great power can be used against us, either on purpose or by accident. Later one is the most probable outcome. Using antimatter in a manner where multiple annihilation occur at the same time in a very small volume near or inside a high density material (e.g. normal rock) can potentially cause a chain reaction which annihilate not only the targeted material but all the surrounding material as well.

One can even speculate if some (or maybe all!) of the observed gamma ray bursts (GRB) are due to accidental usage of antimatter. Major uncontrolled chain reaction most definitely annihilate a whole planet at once. After verification of author's model we can conclude that other civilizations do, or at least did, exist.

## What should be done?

We will need the ground rules for this new technology. Reckless experimenting should be banned and intensive monitoring of the technology usage must be applied. At the same time, we should start building a huge space crafts capable to contain and sustain a large amounts of people. Also using other planets for living is an option.

Bottom line is that we, as mankind, must partially leave our dear planet. Keeping ones eggs in one basket is not an option! However, accomplishing such a task is going to be extremely challenging and time consuming.

Unfortunately we don't have too many options. Banning science altogether would be impossible. Damage is done already!

## When? How?

Needless to say, actions should be taken immediately. Probably United Nations would be the best organisation for managing our efforts. Also some ad hoc organisation put together by high tech countries is an option. Whatever the organisation is or presents, its first task would be the analysis of the situation.

Based on extensive analysis, scientists and policymakers create **the plan** how to mitigate possible risks related to usage of the antimatter technology.

Even if the outcome would be a total ban for the technology there must be actions taken which ultimately allows us to leave (at least partially) Earth. After all, experimenting with antimatter is relatively easy so stopping it completely would be practically impossible.

## Let's do it

We have two options, either we do nothing and the outcome might be the total annihilation of Earth (including mankind) **or** we can tackle this ultimate challenge given to us and keep on flourishing in the universe. Personally I prefer the later.

**Let's do it!**

## References

- [1] Antimatter, Kimmo Rouvari  
<http://www.vixra.org/abs/1305.0115>