

**Keynote speaker Walter Gith  
at the press conference in Brisbane 2007**

**Scientific aspects of time travel**

We think anything is possible! Don't we...  
I mean this is why we are all here today. Aren't we...

Well, may be there are certain things that are just not compatible with  
the existing Universe. So may be a time machine is just not compatible with the  
Universe, like that picture, it is an illusion.



...

The academic community has controversial opinions about TIME MACHINES.

Let's have a look at the discussion so far:  
The answer to the very question is time travel possible depends on the perspective you take towards our reality.  
Therefore the discussion goes far back into ancient history.

### **Different philosophies of life**

- **Present view**  
**I create my own future. My fate is in my hand.**  
***No time travel possible.***
  
- **Timeless view**  
**Whatever comes, I accept my fate. It is all written in the stars.**  
***Time Travel is possible but still with paradoxes involved.***

The old Greeks already developed two different philosophies of life:

1. reality only exists in the ever changing moment called now. Past and future do not exist.

- I would refer to this view as the 'moment' or sometimes also called 'present view'. People having this view strongly believe in free will and you can here statements like "I create my own future. My fate is in my hand."

- This view would not allow time travel, because I can not go to or communicate with something that does not exist.

2. past, present and future all exist embedded in eternity.

- This one I would call the timeless view. People with this view would probably believe in fate and not so much in free will. You would here statements like: "What ever comes, I accept my fate.", "It is all written in the stars."

- This view would allow time travel, but with the known paradoxes. Like, what if you go back in time and kill your grandfather.

Many religions and philosophies tried to combine this to views more or less successful, because finally they flipped towards one or the other.

And you can observe that in your own discussions, once you start thinking about that topic, you all of a sudden find yourself in one or the other view.

But there is more to it, than these 2 views.

Science is trying to find the right perspective on reality too. That leads me to the more recent discussion; it seems that with Einstein and his special and general theory of relativity some doors opened towards time travel. His concept seems to favour the timeless view, because time is now integrated in a new reality called 'spacetime'. Indeed Einstein's theories introduced the latest and most promising thoughts to our very question.

Therefore I will give a very brief overview of the new options, trying to avoid to go too deep into the physical details of course...



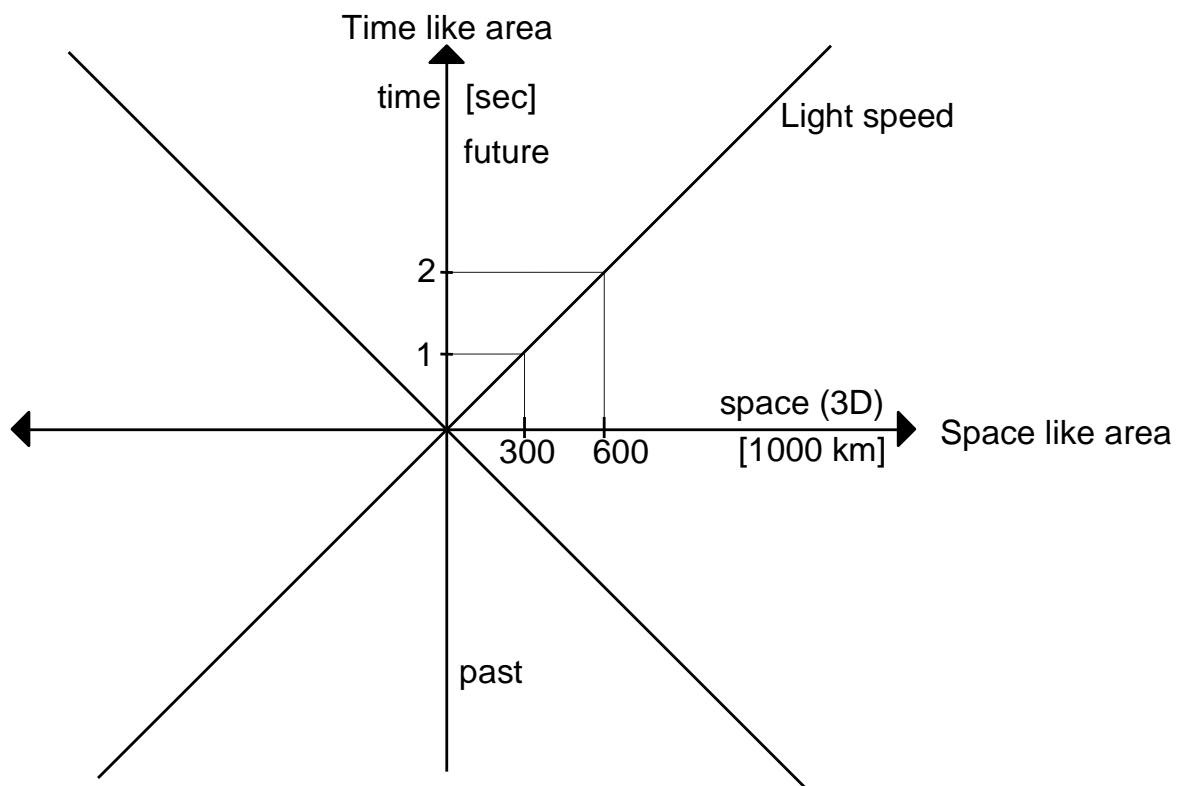
The first major option would be suggested by Einstein's general theory of relativity: Wormholes.

I want to explain this with an easy analogy:

A worm that shortcuts through the surface of an apple. The surface is our spacetime. As soon as you can go through the apple, you can travel in time. (This is where the name 'wormhole' comes from)

Other analogies were used, like the paper sheet below. Again we have to imagine further 2 dimensions. One dimension on the paper represents 3 dimensions in space. But when you fold this paper now, two spacetime coordinates would touch. This is called Einstein-Rosen-Bridge. Travelling through an Einstein-Rosen-Bridge would also be a time travel.

### Spacetime with light speed cone



The physicists tell us also about the obstacles: a time travelling space ship would need 'exotic matter' with negative energy to use a wormhole or an Einstein-Rosen-Bridge. And the existence of exotic matter is not verified yet. Overall the wormholes seem not very practical to do time travel.

The other option is suggested by Einstein's special theory of relativity: That is faster than light travel. Because the theory says: If something can travel faster than light, than that something can go back in time. This is to me the more promising attempt.

But there are technical obstacles again: Einstein's theories are all fundamentally based on the restriction, that no object or even light can travel faster than light. Light speed is the fastest speed that exists for any form of matter.

I personally, when I studied physics, had my problems with this assumption.



Imagine I have 2 torches and we let one of them swing in light beam direction. We measure the speed of the emitted photons in some distance. Then the photons from both torches manage to have the same speed when measured. I was always wondering how they manage to do this.

But, this is how it is. This behaviour of the photons was experimentally verified many times. So we have to accept, that photons have very weird properties.

Einstein showed us a door to time travel, but at the same time he kept it locked, by saying that no object (matter & photons) can travel faster than light. But may be there is something else that can travel faster,

like INFORMATION.

To say it straight away here: Most physicists today would agree, that Einstein's rule about light speed being the fastest speed for objects, would apply for information too. So they would put another lock on Einstein's door to timetravel. How can they reason that? Well, they just use one specific definition of the 'information' term, which allows this restriction.

I personally have a different understanding of the information term: what has information to do with speed at all, I mean either you have information or not. So it all depends on the definition of the information term itself.

This is why I want to talk a bit more about INFORMATION:

I want to start with a situation, which physicists had a while ago, and still have, while investigating entangled quantum systems:

You can have two photons in 2 different locations, but they can instantly change their properties triggered by the 2nd photon. So they 'know' about each other; and that in no time.

That is just one example where physics were confronted with the common information term and they had to deal with it.

So I took a look at the 'Information' term in the internet:

Apart from the fact that there are many different definitions, I could identify the following hierarchy:

### **Areas where information term is used**

1. Meaning <-> conscious mind
2. Information <-> sender & receiver
3. Data <-> pattern of matter
4. Matter

The use of the 'information' term in cases 1. and 2. is mostly found in common sense context. The physicists would use the information term in all 4 levels. That goes from traditional thermodynamics (case 4) to Schrödingers cat in quantum physics (case 1).

Although physicists claim that the information term has a well defined meaning, they use different definitions of the term, without explicitly reflecting the different use.

My humbled opinion is, that a proper use and unique definition of the information term in physics would lead to a new theory, that would integrate quantum physics and the theories of relativity.

As you may have noticed, I am getting very modest here now, towards our very question about time travel: I am saying that if only information could travel faster than light, a time machine would already be possible. I want to explain this: If we say time machine, we should not think of a device that is flying around through time like a plain, it would just be a device that realises a loop, a connection in time. Think of the time machine as a simulator that copies the information from the past into our time travel device. We could watch the past in our laboratory. A bit like in the 'Déjà vu' movie, for those how watched that.

But still ...

We are remaining on an academic level so far. It is all theory.

This is why we created this experiment to lead this topic into practice.

How can we do this?

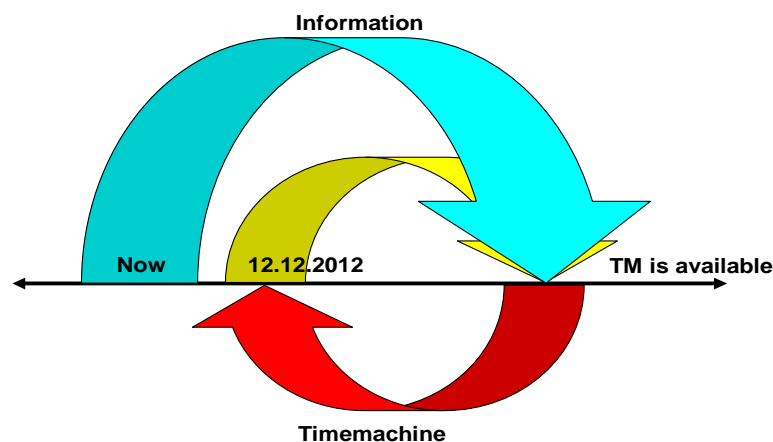
We create a loop in time! And we do this now!

We start a time travel now!

And it will be a travel into the future. Who is travelling?

No one is travelling, but instead we send information into the future.

### Time Travel Scheme



We want to make a connection into the future. This connection will be the one part of the time loop. The second part is the connection back to the past, back to our time. This second part is the part in question. Not our part.

We will carry the very information into the future, that we are ready for the TIME MACHINE to come. Therefore we have to motivate our descendants to carry that information into the future...

And finally to make that very connection, that leads to the development of the time machine, if possible at all...

The more carriers we have for our message the better.

So we need you and all participants still to come, to carry the very message into the future.

We admit that maybe 2012 is just too early for the time machine to arrive. This is why we think, that this whole thing, should be an ongoing process. So even if nothing happens at the 12.12.2012 we have the well founded belief that our Association does still exist after 2012 and will carry the mission on, until the point in time has come, when some connection some loop can be created back into our time. Therefore our Association keeps sending invitations to the future; even after 2012.

And this is the difference to other attempts that took place to invite a time machine, we keep doing it all over again, and we provide even a reward.

You can clearly understand now, that this mission is "non profit" by design. It is an investment, where we don't know the outcome at all.

We have our hopes...

We hope that it will happen while we are still alive.

Either way...

this is a historic moment...

We all launched the development here today;

It is a small step. But as you know, all big things started small.

It starts with information: A message that says, here are people waiting, ready to build a time machine and having a reward in their hands for the brave inventor, which makes a connection into our presents.

We know that this information needs a carrier. And only people living now, can carry this message.

So it is on us once again. We need to do our best to make sure that this information will make it into the future. So please, everybody should register on our homepage [timemachine1212.com](http://timemachine1212.com).

As long as we can keep this idea alive, as long there is hope that mankind is able to create a time machine.

Thank you very much for your attention.