A TIME MACHINE

Vorobyova E. Y. Scientific supervisor – Senior teacher Burmaga S. V.

Siberian Federal University

During the centuries a man tried to get into the secret of time, touch, glance in the future and change his life.

In 1943 the first time the man who faced with the heterogeneity of physical Time was Albert Einstein. It was a well-known Philadelphian experiment where a cocoon was created around the torpedo-boat called "Eldridge". During the experience it became invisible for half of a second but after a while, it appeared again at 480 km away from that place, in Norfolk, a state of Virginia, and then it mysteriously disappeared again, and after it appeared at last in Philadelphia. There weren't any security means and a confidential experiment finished tragically, Einstein burned the manuscripts for fear. He supposed The Time would be used as a weapon against the mankind.

But Einstein's business wasn't finished at all. It was continued by a professor Nikolay Aleksandrovich Kozyrev. He started to design a time machine during his imprisonment in Gulag. For the termination of calculations there wasn't enough knowledge of some astronomical values and he couldn't learn them in prison, it was impossible. Nevertheless



after many years Kozyrev started time experiences in Pulkovsky observatory. He managed to achieve the changes on the rotating flywheels during insignificant fractions of a second. The changes were achieved in the water after dissolving some substances in it. Kozyrev received even more intriguing results by means of unusual mirrors. Kozyrev's mirrors were aluminum spiral planes which and according to a hypothesis offered by the professor, could reflect physical time and, like lenses, focus different kinds of radiations, including the radiation from biological objects. The usual design of Kozyrev's mirrors wasn't complex. There was a folded clockwise, in one and half turns, flexible polished aluminum mirror sheet. Inside it

there was an armchair for a test person and measuring equipments. The received effects by shielding of space by means of mirrors weren't explained till now. The results of the experiments weren't clear too. The people stayed in the chamber for several hours started to feel themselves as the participants of bygone historical events. They saw, as if on a screen, familiar or absolutely unfamiliar actions and characters from their textbooks. The experiments showed the presence of certain danger proceeding from application of incomprehensible effect. For this reason the experiences were interrupted in all cases. And nevertheless, were included into the gold fund of Physics.

Some of these experiences were repeated by Albert Iosifovich Vejnik and some of them were finished a bit later using opaque nonspecular spirals. Having repeated some Kozyrev's experiences he developed his own theory. It was different theory of Time fields. According to this theory it was possible to send any body or a system into their own past or future, i.e. to rejuvenate or make old a body. But Vejnik couldn't bring his work to the end. He went to religion, took to himself a new name – Victor, and burnt his scientific works and books. To tell the truth later he denied his works. Perhaps, he learnt something really dangerous for Mankind.

Many modern scientists consider it is necessary to search for a time machine in space. The existence of black holes was proved for a long time. The scientists assume a black hole is a time machine. All mathematical calculations tell about it. The decision of difficult formulas shows: the space and time in the depth of a black hole is strongly curved. They are literally wrapped in a funnel and interchanged their position. In other words traveling through space becomes traveling through time. However, according to the scientists' opinion using a black hole like a time machine is impossible. The physicists established before a traveler would

have reached a zone, where the laws of traditional physics can't operate, a black hole would kill him. The traveler would simply break up. Besides, if the traveler wouldn't be killed he couldn't manage to return home. To escape such time machine, it would be necessary to move faster than speed of light. And now it is impossible. But the scientists don't hasten to spell the death of a time machine.



Recently the astrophysicists have made a new discovery. Except the black holes there are so-called « wormholes » in space. They can transfer a person from past to future. They are rather like black holes, but there is a huge difference between them. A black hole hasn't got a way back but wormhole's got it. The wormholes haven't been studied yet. The scientists tell there is a tunnel in the wormhole, but it can be closed and opened in different places. In this case a traveler won't be able to find a way home.

In spite of it the scientists set their hopes on the wormholes. For a while it is the only way to get to other galaxies. After all to reach the nearest one it is necessary to have some tens of thousands years. But using a wormhole it would be possible to reach far worlds for two terrestrial days.

The science doesn't stand pat, it moves ahead. Traveling through time isn't a fantastic area any more. Today there are real developments in this direction and may be tomorrow a time machine will become an ordinariness for us.