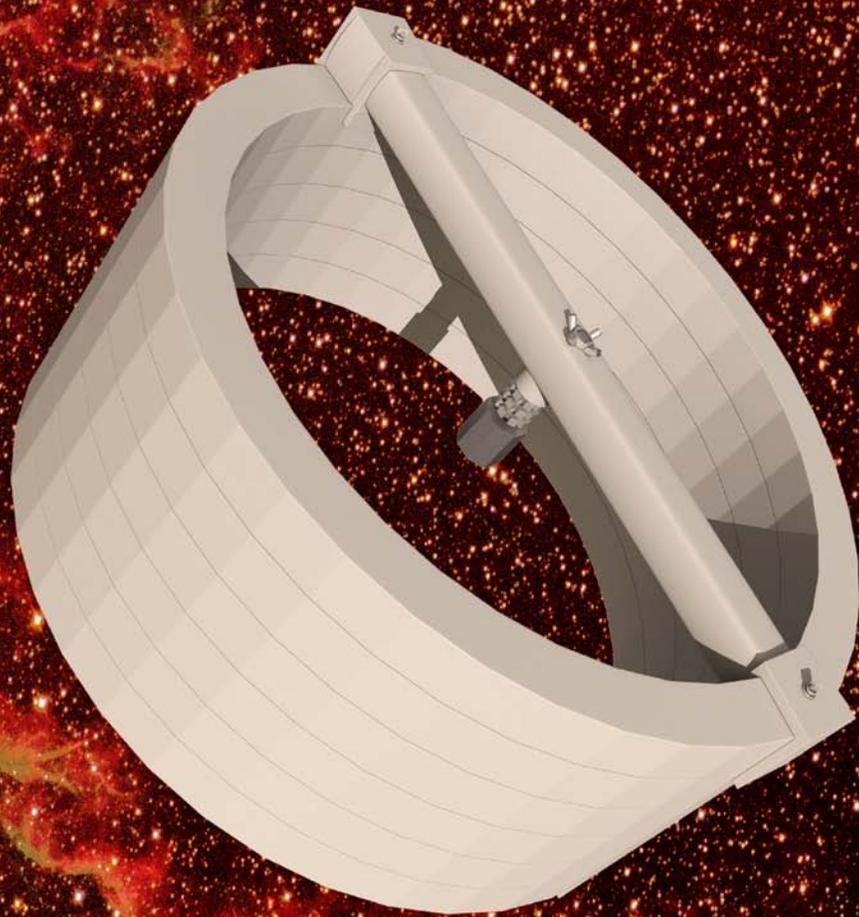




# Space colony Helix



Space settlement contest

A step into the future or a journey in time – this is how we can describe these four months in which we worked on the design of the space colony Helix.

We set out to research the conditions of the environment in which our small world will be build and last. We eagerly discussed the Kordylewski clouds that have piled up in  $L_4$  and  $L_5$  and how we can remove them.

One of the biggest advantages of our colony is its unique shape – double helix perennially being extended by the construction dumbbell. We thought of an original step by step plan for constructing the colony, a secured and reliable home for at least 10 000 human beings. In our discussions we considered some other exotic shapes like fractals and the shape of the DNA molecule.

Another unique thing in our colony is the segmentation of the spirals in ten thematic modules. We designed ten extravagant residential districts. We are sure that in a colony like ours everyone will be pleased to live, get entertained, do sports and work. Each one of the inhabitants of the colony will work for six hours daily and during their free time they may choose to go to one of the other modules. Where they can do sports that originate on Earth or new ones that will be created especially for the colony or just relax in the sphere, crystal or eastern beauty module. The very best of Earth architecture will be used in the buildings of the skyscraper, water world and park modules. By designing these ten modules we aimed to provide variety and freedom to modify your living space and be happy. In that way we would create a picturesque living space with the same variety and beauty as Earth.

Special attention is paid to the life support systems. Original and out of the box is how we plan to feed the colonialists- we think that all the vital and necessary nutrients can be extracted from a number of different seaweed and fish species. We have found the right solutions to all of the challenges of space including the radiation and impact hazards.

We were especially interested in the foundations of the new colonial society. We tried to put all the necessary laws needed for governing. In it we have embodied our extravagant and new ideas about the social relations, responsibilities and structure. We drew the coat of arms and the flag of our colony using the colors gold yellow and black that represent the mighty solar corona and the stunning beauty of the deep space.

This is the space colony Helix – one amazing out of this world but still earthly beautiful and comfort habitat for 10 000 colonialists that will make the Cosmos our new home. This is our most daring and beautiful dream world. The Earth is only the cradle of our civilization and we will walk the first steps in the future quest for knowledge.

**“This small step for a man is a giant leap for mankind”**

**Neil Armstrong**

## **The team**

Franz Fischbach – “Kliment Ohridski” High School

Stoyan Stoyanov – High School of Mathematics

Borislav Nedelchev - High School of Mathematics

Zhulien Keremedchiev – High School of Natural Sciences

Canko Jordanov - High School of Natural Sciences

Veliko Kolev - High School of Natural Sciences

Christo Minev – Professional High School for Architecture, Construction and Geodesy

Konstantin Panayotov - Professional High School for Architecture, Construction and Geodesy

Halil Halil - Professional High School for architecture, Construction and Geodesy

Chirstomir Christomirov - “Kliment Ohridski” High School

Klimentina Christova – National School of Arts

Iliyan Trayanov- Fifty Language High School

Mario Christov – Forth Language High School

Team leader: Dr. Veselka Radeva

Astronomical Observatory and Planetarium –Varna



Фиг.1.1. The team

All the students from the team attend the astronomy courses at the National Observatory and Planetarium “Nicolaus Copernicus”-Varna, Bulgaria.

Team leader: Dr. Veselka Radeva, Astronomical Observatory and Planetarium “Nicolaus Copernicus”-Varna, Bulgaria

Category: Large Group 11-12 grade