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USING ASTRONOMY TO PROMOTE A SCIENTIFIC CULTURE IN THE PUBLIC

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RESUMEN

El nuevo Centro Cultural para Ciencia y Tecnología "Planetario Habana", actualmente en construcción, es un proyecto conjunto entre la oficina del Historiador de la Ciudad de la Habana y el Ministerio de Ciencia, Tecnología y Ambiente de Cuba. El centro estará destinado a guiar el interés por las ciencias básicas y la formación astronómica de la gente en el área más poblada y frecuentada del país. Un objetivo clave de este proyecto será servir como motivación y entretenimiento educativos para los visitantes casuales o habituales de estas instalaciones, ofreciéndoles la posibilidad de disfrutar representaciones, jugar con equipos interactivos y escuchar presentaciones sobre astronomía y ciencias afines, dictadas por especialistas calificados, profesores y estudiantes universitarios. Otra propuesta fundamental será establecer un plan de complemento educativo, en coordinación con las escuelas, para permitir a los niños y jóvenes participar en actividades que les permitan entrar en el fascinante mundo de la Astronomía y la Exploración del Espacio y la Vida Extraterrestre como un fenómeno cósmico. El funcionamiento del Centro Cultural para Ciencia y Tecnología "Planetario Habana" mostrará en funcionamiento el Planetario GOTO G CUBA financiado por un programa de Ayuda Cultural Japonés. Este Centro desarrollará un polo sin igual en el escenario nacional para la divulgación y educación científica en estas ciencias. Rodeado por lo atractivo del ambiente colonial de la vieja ciudad de la Habana, se convertirá en el centro de diseminación de información sobre los nuevos descubrimientos y programas científicos desarrollados a nivel nacional e internacional. Aquí presentamos una vista general del proyecto, sus objetivos y su desarrollo actual y futuro.

ABSTRACT

The new "Planetario Habana" Cultural Centre for Science and Technology under construction is a joint project between the Office of the Historian of the City of Havana and the Ministry of Science, Technology and Environment of Cuba. The whole centre will be aimed at guiding the interest towards basic sciences and astronomical formation of the people, in the most populated and frequented area of the country. A key objective of this project shall be serving as an instructive motivation and entertainment for the casual or habitual visitors to these facilities, offering them the possibility to enjoy vivid representations, play with interactive amusement equipments and listen to instructive presentations on astronomy and related sciences guided by qualified specialists, professors and outstanding university students. Another fundamental purpose shall be the establishment of a plan for educational complementation in coordination with schools in order to allow children and young people to participate in activities enabling them to get into the fascinating world of Astronomy, Exploration of Outer Space and Life as Cosmic Phenomenon. The setting up of the "Planetario Habana" Cultural Centre for Science and Technology will show in function the GOTO Planetarium G Cuba custom obtained under a Japanese Cultural Grant Aid. This centre shall develop into a nonpareil pole in the national environment for the scientific outreach and education of these sciences. Surrounded by the attractiveness of the colonial "ambience" of the Old Town of Havana, it shall become a centre for dissemination of information about new discoveries and scientific programs developed at national and international level. Here we present a general view of the project, its objectives, and its present and future development.

Key Words: education — outreach

1. DEVELOPMENT OF THE CULTURAL CENTER-PLANETARIUM

The Planetarium and the Cultural Centre of Science and Technology in Havana is a single project under the supervision of the Historian Office and the scientific assistance of the Ministry of Science, Technology and Environment. This Ministry will show the principal attraction the new brand Planetarium of Havana, which was obtained through the Japanese Cultural Grant Aid (OAD).

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This Planetarium will be addressed to the Popularization, Education, Exhibition, Promotion and Researches by students who contribute to the appropriation of knowledge by the citizens about Science and Technology in general, but especially about aspects related to Technology and elementary Science, Mathematics, Chemistry and Physics. These aspects are visualized through phenomena and motivations of Astronomy, Astrophysics, Cosmology, Cosmonautics, Space Exploration and its interrelations with other sciences.

This new center at the service of Cuban people will be located in an old building, rebuilt with a colonial style. It is 20 meters high and occupies 530 meters square of one of the most attractive squares at the historical center of the city.

The Cultural Center-Planetarium will offer to the visitors several amenities, which will extend and reinforce peopleâs knowledge about profound concepts such as size, age, origin of the universe, the evolution of the galaxies, the stars, the planets, as well as the human dimension in the cosmos, among other aspects about modern science.

The Planetarium will be inside the building and will be the main attraction. A ten meters-spherical dome will hold a Japanese GOTO G CUBA CUSTOM projector. This dome will function as the screen projection within a giant-12 meters diameter sphere for the Space Theater. The sphere controls visually the whole main hall of the building.

As a cultural center is pre-eminent for the Science and the Space Technology, the Planetarium's mission and responsibility will contribute to the education of its visitors about the most varied aspects of physics through Astronomy, Astrophysics and other interrelated sciences.

The Planetarium will also aim to share with the public knowledge about how we fit in our planet, our galaxy, and in the universe that surrounds us. In this way, people's knowledge will increase to the highest levels.

Since the Cultural Center-Planetarium holds modern technology and imagery, it will provide knowledge to its visitors in a direct way about the development that has been reached in relation to the most advanced studies, that has been pushed by the conquest of the outer space, and that have had a quite considerable social impact, as well as the possibilities of future developments.

Our nation, specially our capital city, will feel proud to be able to create this cultural unit at the service of the science and the education of its people. In this place people at any age will enjoy a transporting and transforming educational experience and they will also be satisfied for having played an outstanding role, joined to the twenty first century perspective.

The key objective to be reached with the representations inside the Planetarium is that the whole Cultural Center exhibits the concepts of Physics through the modern Astrophysics, accessible to all kind of public.

The goal will be to let the universe go down to earth so that all the visitors, no matters what their knowledge level is before coming to the Center, know the organized zoo of objects and cosmic phenomena, organized by the physics principles that join them.

The visitor will have the power not only to appreciate the beauty of the cosmos, but also to know how the universe works. This power constitutes an effective measure to reach the scientific culture the Cuban people hope.

2. CONCLUSIONS

The Cultural Center-Planetarium will be a modern concept, embedded in a colonial architecture and in a traditional outer atmosphere. The exhibitions, the space show and the rest of facilities will provide the visitors a set of tools to bring home, concepts and information about the universe, which before were too remote and too complex for the ordinary citizen. It will be, undoubtedly, a unique educational opportunity in the country to demythologize the universe, providing the latest scientific images and data available to the understanding of learners of all ages.

REFERENCES

Alvarez, O. 2006 in 26th IAU Meeting Special Session 5, Astronomy for the Developing World (SPS5 #12; Cambridge: Cambridge Univ. Press)