

The International Institute for Advanced Studies of Space Representation Sciences was founded in Palermo on 2000 by the scientist Giuseppe Maria Catalano.

In 2000 the scientist looks back on many years of teaching and research activities carried out since 1984 in the Department of Representation of the University of Palermo.

He published volumes, articles in the most prestigious international scientific magazines as well as contributions in national and international meetings, treating of theories of Space Representation Sciences, Descriptive Geometry Applications and also Survey, Photogrammetry, Perception and Epistemology of Representation, Automatic Design, History of Space Representation, Visual Communication Technique, Ancient Architecture and Earth Science.

In the same time he created instruments for survey and representation.

In 1990 he creates the conical compass, a tool to trace any polyconic and conical with a continuous motion. In 1994 he realizes the theory of Cromosintagma, that plays the workings of the human visual system in the choice of color combinations.

In 1992 he does the first important discovery, the geometric demonstration of the grand Earth expansion, that has stopped the bitter quarrel arisen among eminent scientists during last decennia. This discovery involves many science fields and especially throws new light on the earthquake in its global origin.

In 1995 he enunciates the fundamental theorem of representation. It allows to unify, in spite of the distinct in the space and time genesis, all the methods of the Representation Science. He also realizes the theory of absolute no-measurability of space.

The scientist has been carrying on for years a decisive turning point in the development of Projective Geometry, the mother of disciplines grouped in the sector of the Representation of Space Science, for too many years standing and withered. He has, however, found little support, a lot of indifference and even condemnation in the national field.

The national infertility is accompanied by the lack of interest by the academic and political world for basic research and thus further impoverishment of the theoretical development of the subject, that, being at the root of all branches of science, with its dryness curbs the growth of all fields of knowledge.

Then, in 1999 the scientist realized the upsetting discoveries finally authenticating the Holy Shroud and the Sudarium of Oviedo, proving that a geometrically definite radiation, emanated by a quite fit man, printed on the Linen the images, following and close, of a regular and conscious bodily movement.

Everything leads the scientist to the creation of his own research center that push forward the development of the subject, setting, thanks to the Internet, on the world stage, both to collaborate with the international development of the subject, and to encourage the dissemination of his discoveries without any state, political or religion influence, so that to defend the truth of Science for all peoples' sake.

The time was ripe to set the free initiative against the academic refusal, a trying and hard initiative lacking in moral and financial, public and private, support.

Anyway, the International Institute for Advance Studies of Space Representation Sciences was born in Santa Flavia Solùnto, village of great cultural and touristic interest in the sourroundings of Palermo, close to the Archaeological Park and Museum of Solùnto and Natural Park of Monte Catalfano.

Since 2000 to date, the research has confirmed and extended with new investigative means, the knowledge of the extraordinary phenomenon witnessed by the Shroud, which is confirmed by far the most precious relic of the planet.

In 2008 he lays the foundations of the theory of the dimensions of space, that is based on the theory of absolute no-measurability, proving the existence of the fourth geometric dimension, in addition to the three dimensions of space-time

Always in 2008 the scientist also demonstrates the General Theorem of Poliedron Prisms on the bases of the topological homeomorphism, reaching, unlike Cartesio's and Euler's demonstrations, later generalized by Huilier, extreme slenderness and elegance. The importance of the result consists in the demonstration that homeomorphism can solve or simplify many other geometrical problems.

In 2011 the scientist demonstrates Kepler conjecture on the packing of spheres, that was considered till now one of the great mathematical non resolved problems. The demonstration has deep implications, like, for example, the organization of the data in the computers. The theorem not only prove the validity of Kepler conjecture, but too simplicity, brevity and elegance of projective geometrical solutions, compared with gigantic, complex course of computation.

In 2016 completes the development of the dimensions of space theory, which completes the fusion of geometry and physics begun by A. Einstein.