Acronyms and abbreviations

A

AAAPT: Asian African Association for Plasma Training based at the Department of Physics, 54

ANSOLE: The African Network for Solar Energy, 53

AUB: American University of Beirut, 29 AUST: African University of Science and Technology, 26

B

BIPTUN: acronym formed from the initial of the countries forming an OEA Network, namely, Bangladesh, India, Pakistan, Turkey and Uzbekistan, 57

C

CAMS: Centre for Advanced Mathematical Sciences, 18

CBPF: Centro Brasileiro de Pesquisas Fisicas, 62

CEDEAN: Centre of Applications and Nuclear Development, 61

CEPAMOQ: The Centre of Atomic, Molecular Physics and Quantum Optics, 14, 49, 76

CERN: Conseil Européenne pour la Recherche Nucléaire, the European Organization for Nuclear Research, 21

Chelsea College, The University of London, England, 73

CIMPA: Centre International de Mathématiques Pures et Appliquées, 22

CSIR: Centre for Mathematical Modelling and Computer Simulation, 55

CLAF: Centro Latino Americano de Fisica, 42, 62

CPT: Center for Theoretical Physics, 15, 30

CRAAG: Centre of Research of Astronomy, Astrophysics and Geophysics, 48

CSP: Centre for Space Physics, 39

G

GIK: Ghulam Ishaq Khan Institute of Engineering Sciences and Technology, 34

H

HTS: high-temperature superconductors, 37

Ι

IBM: International Business Machines Corporation, 37

ICIMAF: Instituto de Cibernetica, Matematica y Fisica, 62

ICMPA: The International Chair in Mathematical Physics and Applications, 32

ICO: International Commission for Optics, 72

ICS: International Centre for Science and High Technology, 52

ICTP: The International Centre for Theoretical Physics, 1

IMCA:The Instituto de Matemática y Ciencias Afines, 22

IMPA: Instituto de Matematica Pura e Aplicada, 22

IMSP: L'Institut de Mathématiques et de Sciences Physiques, 12, 77

ISRO: Indian Space Research Organization, 40

IUPAP: International Union of Pure and Applied Physics, 71

K

KNUST: Kwame Nkrumah University of Science and Technology, 32

\mathbf{L}

LABS: Laboratory for Accelerator Based Sciences, 52

LAFOC: The Laser and Fiber Optics Centre, 13

LAM: The African Lasers, Atomic, Molecular and Optical Science Network, 47

LSAMA: Laboratoire de Spectroscopie Atomique Moléculaire et Applications, 48

LPS; Laboratory for Physical Studies, 21

N

NAGET: The North African Group for Earthquakes and Tsunamis, 48

Nano-Afnet: The Nano African Network Initiative, 52

NRF: National Research Foundation, 52 NUU:National University of Uzbekistan, 35

NUST: National University of Sciences and Technology, 57

0

OEA: The Office of External Activities, 1,

P

PSGSTU: The Pavel Sukhoi Gomel State Technical University, 21

Q

QAU: Quaid-i-Azam University, 37

R

RAGAAD: The African Network in Geometry and Algebra Applied to Development, 51

S

SEENET-MTP: The Southeast European Network in Mathematics and Theoretical Physics, 41

SMLAC: Seismic microzoning of Latin American Cities, 59

SPIE: The International Society for Optical Engineering, 72

T

TWAS: Academy of Sciences for the Developing World, 71

U

UAC: University of Abomey-Calavi Cotonou in Benin 32

UCAD: University Cheikh Anta Diop, 13

UNAM: University of Namibia, 29

UNESCO: The United Nations Educational, Scientific and Cultural Organization, 32

UNI: Universidad Nacional de Ingenieria, Lima, Peru, 22

UNIDO: United Nations Industrial Development Organization, 52

W

WATS: West African Training School in Analysis and later in Algebra, Geometry and Algorithms, 28

\mathbf{Z}

ZCST : The Affiliated Centre at the Zewail City for Science and Technology, 15

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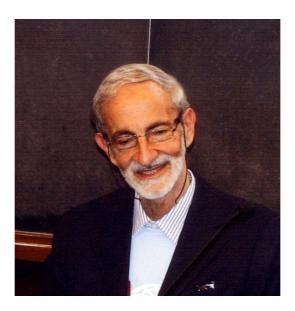
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Julian Chela-Flores was born in Caracas, the Bolivarian Republic of Venezuela. He studied in the University of London, England, where he obtained a Ph.D. in Quantum Mechanics (1969). He was a researcher at the Venezuelan Institute for Scientific Research (IVIC) from 1971 till 1978 and Professor at Simón Bolívar University (USB, Caracas) until his retirement in 1990. During his USB tenure he was Dean of Research from 1979 till 1985. Chela-Flores is a Fellow of The Latin American Academy of Sciences (Caracas), The Academy of Sciences of the Developing World (Trieste), the Academy of Creative Endeavors (Moscow) and a Corresponding Member of the Venezuelan Academy of Physics, Mathematics and Natural Sciences (Caracas).

His current positions are Staff Associate of the Abdus Salam International Center for Theoretical Physics (ICTP), Trieste, Research Associate, Dublin Institute for Advanced Studies (DIAS) and Profesor-Titular, Institute of Advanced Studies (IDEA), Caracas. His area of expertise is astrobiology, in which he is the author of numerous papers in specialized journals, including some articles published in the frontier between astrobiology and the humanities.

Following a suggestion of Professor Abdus Salam, he organized a series of conferences in Trieste on Chemical Evolution and the Origin of Life from 1992 till 1994 with the astrobiology pioneer Cyril Ponnamperuma. From 1995 till 1998 he co-directed these events with Francois Raulin. Finally, from 2001 till 2003 these astrobiological conferences were codirected with Raulin and Tobias Owen, both of whom are distinguished planetary scientists; amongst other achievements they are Interdisciplinary Scientists in the current Cassini-Huygens Mission to Saturn. Chela-Flores is also the author of *The New Science of Astrobiology From Genesis of the Living Cell to Evolution of Intelligent Behavior in the Universe* (2001 and reissued in 2004 in a paperback edition). A Second Genesis: Stepping-stones towards the intelligibility of nature was published in 2009. The second edition of his book on astrobiology was published in 2011 with the title *The Science of Astrobiology A personal view on learning how to read the Book of Life*.