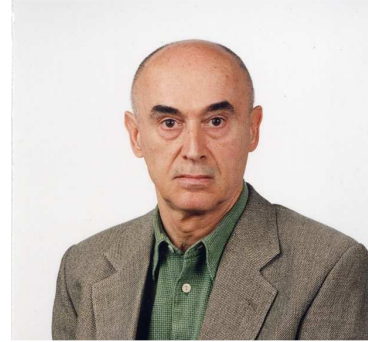# Boccaletti Dino

Position: Professor of Celestial Mechanics

University of Rome "La Sapienza"

Period covered: 1987- present

I Scientific Work

Researches in the field of Physics of Elementary particles (in the first period), Theoretical Astrophysics, Theory of the gravitational waves, Stellar Dynamics, Celestial Mechanics, Mathematical Physics. The relevant papers are published on Nature, Nuovo Cimento B, Physical Review D, Astronomy & Dynamical Astronomy. An aside activity has regarded the history of Astronomy.

II Conferences and educational activities

In the last years communications at meetings on General Relativity and Celestial Mechanics

Work With Students

In the last twenty years many students have been aided at the beginning of their researches on topics of Celestial Mechanics and someone supervised until the doctorate

Diploma thesis supervision

Since 1987 about 70 thesis on topics of Celestial Mechanics

Other Teaching Duties

Member of the "Collegio Docenti" of the "Dottorato in Astronomia" at the University of Rome "La Sapienza" until October 31th 2007. Now member of the Faculty of the IRAP PhD.

Researches in collaboration.

The latest postdoc is still involved in researches in collaboration (application of the technique of the normal forms to the study of galactic potentials).

III Service activities

Within ICRANet

No direct service activities but collaboration in some occasion regarding topics of research of mutual interest

IV Other

Member of IAU (International Astronomical Union)
• Commission 7 (Celestial Mechanics & Dinamical Astronomy)
• Commission 41 (History of Astronomy)
Member of SAIT (Società Astronomica Italiana)

V 2007-2008 List of Publications

Space-time Trigonometry and formalization of the "Twin paradox" for uniform and accelerated motions, Dino Boccaletti, Francesco Catoni, Vincenzo Catoni, *Adv. Appl. Clifford alg.* **17;** 1-22

Formalization of the "Twin paradox" for non-uniformly accelerated motions, Dino Boccaletti, Francesco Catoni, Vincenzo Catoni, *Adv. Appl. Clifford alg.* **17**; 611-616

On the orbit structure of the logarithmic potential, Cinzia Belmonte, Dino Boccaletti, Giuseppe Pucacco, *The Astrophysical Journal* **669**; 202-217 **2008**

The Mathematics of Minkowski Space-Time, Dino Boccaletti, Francesco Catoni, Roberto Cannata, Vincenzo Catoni, Enrico Nichelatti, Paolo Zampetti, [*Birkhäuser, 2008*]

Periodic orbits in the logarithmic potential, Cinzia Belmonte, Dino Boccaletti, Giuseppe Pucacco, A&A **489**; 1055-1063

Quantitative predictions with detuned normal forms, Giuseppe Pucacco, Dino Boccaletti, Cinzia Belmonte, *Celestial Mechanics and Dynamical Astronomy,* **102**; 163-176

Approximate First Integrals with the Method of Lie-Transforms normalization, Cinzia Belmonte, Dino Boccaletti, Giuseppe Pucacco, Qualitative Theory of Dinamical Systems; **7**, 43-71 **In press**

A theorem of Beltrami and the integration of the geodesic equations, Dino Boccaletti, Francesco Catoni, Roberto Cannata, Paolo Zampetti, *11th Marcel Grossmann Meeting on General Relativity June 23-29 Berlin. Proceedings (in press).*