## Giovanni Fabrizio Bignami (short CV)

b. 1944, Italian citizenship, Physics degree (1968, U. of Milan), Doctorat d'Etat (1981, Paris). Currently: Full Professor of Astronomy, Istituto Universitario di Studi Superiori (IUSS), Pavia, Italy President of the Italian National Institute for Astrophysics (INAF)

A student of the famous physicist Giuseppe Occhialini, GFB has done research in space, taking part, in Italy, Europe and the USA, in the design, construction and exploitation of missions such as: TD1(ESRO,1971), SAS2(NASA,1973), COS-B(ESA,1975-82), Integral(ESA, 2002). He was **Principal Investigator** (1988-97) of the EPIC instrument for ESA's XMM/Newton mission.

From 1970 to '90 he was a **CNR staff researcher**, with working visits at NASA and ESA Centres, but also in Germany, USSR and France, where he was Visiting Professor at Univ. Paris VII in 1989. In Italy, he was appointed full professor in Physics in 1990 and in Astronomy in 1997.

From 1997 to 2002 he was Director of Science at the Italian Space Agency.

From 2003 to '06 he was **Director of the** *Centre d'Etude Spatiale des Rayonnements*, **Toulouse** (French CNRS and University of Toulouse), one of the biggest space research Institutes in France. Member of the CNRS Central Scientific Council (2000-03), he was later (2003-06) asked to serve on the CERES, the Space Strategy Committee of the French Space Agency (CNES).

After having served on ESA's Astronomy Working Group ('84-'88), ESA's Space Science Advisory Committee ('94-'98) and ESA' Science Policy Committee ('99-'02), from '04 to '06 he was **Chairman of the SSAC**, and for ESA he coordinated the **"Cosmic Vision 2015-2025"** plan for the future of European Space Science.

From 2007 to 2008 he was **President of the Italian Space Agency.** 

In '09 he was **President of the Scientific Council of P2I, a "Groupment d'Interet Scientifique"** of 19 Physics and Astrophysics Institutions in the Paris area (Ile de France). In'09, he was a member of a **Director Search Committee for the Max-Planck Gesellschaft.** In '09 and '10 he acted as an expert for the French Research Evaluation Agency (AERES), **chairing the CNES evaluation Committee**. He is also an expert for the French ANR (National Research Agency).

In July 2010 GFB has been elected **President of COSPAR**, the Committee on Space Research, a worldwide organization (47 member states), active within ICSU (UN) since 1958.

Since August 2011 he is President of the Italian National Institute for Astrophysics (INAF)

GFB has authored more than 200 papers in refereed journals and many invited papers etc., with about 10,000 citations and an H factor of about 46.

He is currently an active scientist, with significant papers on multidisciplinary astrophysics results and their theoretical interpretations. (Over the last three years, three papers in Science as well as 8 other high-impact papers, including the most cited astrophysics paper in 2012)

GFB is a member of the **Accademia dei Lincei**, is an **Associè Etranger of the French Académie des Sciences**, and a member of the Academia Europaea, the International Academy of Astronautics, the Istituto Veneto, the *Academie de l'Air e de l'Espace* and more.

A pioneer of interdisciplinary astronomy, in 1993 he was awarded (first Italian) the **Bruno Rossi Prize of the American Astronomical Society**. In 2002 he received (first Italian) the **Massey Medal** by the Royal Society (UK) and COSPAR "for leadership in space science". In 2004 he received the **Astronomy Prize** of the Italian Culture Ministry, given every four years, in 2010 the "**Blaise Pascal Medal** » for **Astrophysics**, European Academy of Sciences, and in 2010 the "**Von Karman Award**" of the International Academy of Astronautics.

In May 2000 he was made "Officier de l'Ordre National du Mérite" of the French Republic In April 2006 he was made Officier de la Legion d'Honneur of the French Republic A well known science popularizer, but also with a strong interest in languages and humanities, GFB is very active in **science policy** and **opinion making.** He has contributed more than 300 articles in newspapers, science magazines and encyclopaedias

He has created and talented **several TV series**, for RAI and for National Geographic Channel, Italy. He has also worked with the ESA and CERN TV programmes, and with Antenne 2 in France.

Worldwide, he is a regular **contributor to Nature (27 pieces), Science (18),** the McGraw-Hill Encycl.(3), to the **opinion page of the International Herald Tribune (7)** and more.

He has published **seven books**, translated in four languages:

- Against the Donning of the Gown, the first English version (in jambic pentametrs) of a long (301 lines) poem written by Galileo Galilei in 1590 (Moonbooks, London, 2000 and Pisa, 2009),
- La storia nello spazio (Mursia, Milano, 2001), published in French as: Explorer l'Espace pour Remonter le Temps (Odile Jacob, Paris, 2006)
- L'esplorazione dello spazio (Il Mulino, Bologna, 2006).
- I Marziani siamo noi (Zanichelli 2010), now published in German (Wir sind die Marsmenschen, Spektrum, 2012), French (Des etoiles et des hommes, Cherche-Midi, 2012), English (We are the Martians, Springer, 2012) and Chinese (Science Press, 2013).
- Cosa resta da scoprire (Mondadori, 2011), now being translated in English
- Il futuro spiegato ai ragazzi (Mondadori, 2012)
- A Scenario for Interstellar Exploration (Springer, 2013)