

## Nichi's work: the basis from which INAF starts

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**Abstract.** The first three contributions of this Volume are memories of Nichi D'Amico written by the three leading figures of the current INAF, who also worked with Nichi, in the context of the management of INAF, during his first Presidency. This first writing is from the President of the Institute. This contribution has been translated by Andrea Possenti from the originally provided Italian version.

I met Nichi in the second half of the 80s when I was in the USA and every now and then I spent time in Italy. At the time I was working on various problems related to the evolution of radio pulsars in binary systems (not yet discovered at the time) and more generally on aspects of the relativistic wind of particles emanating from pulsars. I remember a visit to the Medicine radio telescope with Nichi who showed me various apparatuses and explained his pulsar research in collaboration with the "Australians" (Dick Manchester and collaborators), and the "English" of Jodrell Bank (Andrew Lyne and collaborators) . The trio of Italians, British and Australians discovered at that time many pulsars, all beautiful and very interesting. I remember going to dinner with him at his house, and a pleasant and passionate conversation linked to the discoveries of the moment. A few years later I personally met both Dick Manchester and Andrew Lyne while I was in Princeton. I was able to see how the work of Nichi's group was highly appreciated and well placed in the international context. I also remember very vividly the discovery of the binary pulsar PSR 1259-63 with a Be-type companion star of about 10 solar masses, a sort of Crab pulsar but with a variable environment around the pulsar and its wind. A fantastic system because the next step was at the time and still today the discovery of a radio pulsar with a black hole as a mass companion always around 10 solar masses. The aforementioned trio strenuously searches for these types of systems and sooner or later they will find them thanks also to the great work of Nichi and collaborators.

I then lost sight of Nichi in the following vears, but I found him President of INAF on the Board of Directors of which I was a member since the end of 2015. Unfortunately, in that context there was not much time left to talk about astrophysics in an extensive way: there are many other discussions on the board of a body such as INAF! But even in this case the passion was not lacking: there was collaboration and work based on heated discussions, great respect and undoubtedly common goals. Many battles were fought together in those years: first of all, the attention dedicated to the employment of more than two hundred researchers and technologists in a few years, an operation never carried out before in INAF and which has solved a series of problems that had to be addressed. Nichi has also strenuously defended, and made our governing bodies appreciate, the enormous effort made by the Institution in international projects; his work is in fact the basis from which INAF starts in the first years of this decade that has just begun.

Now it's up to us. Italian astrophysics is experiencing a moment of growth and planning in all observational and theoretical sectors that include optical astronomy, radio astronomy, the study of the sun and the solar system, high energy astrophysics. It is very important that this impulse is well focused on obtaining the best scientific and technological results. We therefore hope to be able to complete the projects initiated by and with Nichi and to project Italian astrophysics towards new goals and successes. We owe you, Nichi.