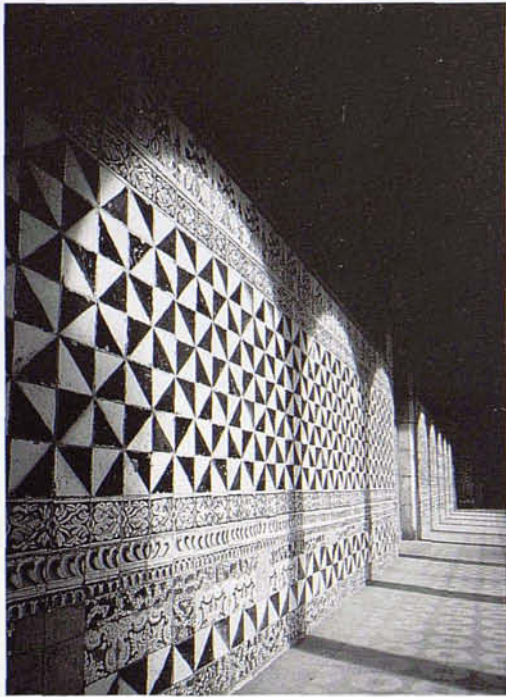


# THE FERRAN SUNYER I BALAGUER FOUNDATION



FERRAN SUNYER I BALAGUER (FIGUERES, 1912-1967) WAS ONE OF THE MOST IMPORTANT CATALAN MATHEMATICIANS. HIS PREMATURE DEATH WAS A GREAT LOSS FOR SCIENTIFIC CULTURE. IN DECEMBER 1991, THROUGH THE INSTITUT D'ESTUDIS CATALANS, HIS FAMILY SET UP THE FOUNDATION WHICH BEARS HIS NAME, AND WHOSE CHIEF AIM IS TO AWARD PRIZES FOR MATHEMATICAL RESEARCH, FOR WHICH SCIENTISTS FROM ALL PARTS OF THE WORLD ARE ELIGIBLE.

MANUEL CASTELLET GENERAL SECRETARY.  
INSTITUT D'ESTUDIS CATALANS

**F**or the man in the street, mathematics and professional mathematicians fall into a confused hotch-potch of ideas, of things which exist but which no-one really understands why or even what use they are.

This, no doubt, is the fruit of ignorance arising essentially for two reasons: the intrinsic difficulty of communicating the essence of mathematics and the work of these professionals, and the inability to do so on the part of mathematicians and sometimes their lack of interest in doing so. Nevertheless, it is a science that is respected at all levels of society and often almost idolized, it is considered fundamental and produces reactions comparable to those of a mag-

netic type: in some cases attraction, in others repulsion.

If we turn to the scientific, humanistic or technological world, a large part of those concerned would probably express an interest in receiving an answer to the following question: "What is happening in mathematics in Catalonia?" A glance at scientific progress in our country reveals an exponential growth of mathematical activity. Not only has the number of investigators and the amount of research grown in volume and quality, but furthermore Barcelona is becoming one of the elite world centres.

Areas that can have a research institute like the Centre de Recerca Matemàtica, where every year some thirty re-

searchers from all over the world work, that can collect six Fields Medals (the equivalent of the Nobel Prize) at a congress in Barcelona, and that can award an international prize like the Ferran Sunyer i Balaguer prize, are few and far between in Barcelona. "What is happening, then, in mathematics?"

Ferran Sunyer i Balaguer is, through his work—that of his lifetime and the work he left behind him—, one answer to this question. It was in his memory that his family, through the Institut d'Estudis Catalans, set up the foundation which bears his name, and whose chief aim is to award prizes for mathematical research, for which scientists from all parts of the world are eligible.

Ferran Sunyer i Balaguer, born in Figue-

res in 1912, belongs amongst our country's most important mathematicians, and his unexpected and premature death in 1967 was a great loss for Catalan scientific culture. If his mathematical work is valuable in itself, our admiration for the man grows when we consider that he was from birth affected by total paralysis which prevented him even from going to school.

His life from childhood with his cousins meant that, along with them, he progressed culturally until an interest was aroused in him for physics, astronomy and mathematics. A moment came when he found himself at a crossroads where he had to choose between the austere work of the scientist and his prodigious facility for the game of chess. Having chosen the path of devotion to science and rejected the idea of teaching—the only activity with professional possibilities which is usual amongst us for a mathematician—, all that was left for him to do was to dedicate himself to research.

In 1939 he submitted a paper for the consideration of Professor Hadamard, of the Academy of Sciences of Paris, and the reply was its publication in the Academy's *Comptes Rendus*. From that moment on a fertile relationship was established between Sunyer i Balaguer and the Hadamard college, which gave rise to important advances in the Theory of Functions, in which our mathematician was an undisputed international authority.

In 1957 Sunyer i Balaguer attended the first meeting of Romance-language mathematicians, in Nice, where he personally met Mandelbrojt, of the Collège de France, with whom he subsequently collaborated in the drafting of a monograph on the Dirichlet Series.

He did not write this work himself, but dictated it, since his physical condition allowed him no other solution. In the beginning it was his mother who took down what the investigator dictated, until her death in 1955 produced the disconsolate void of separation. Her memory, though, encouraged him to continue steadfastly with his research work, helped from then on by his cousins. This continuity in his work, added to the intellectual gifts he possessed, gave as a result his abundant and valuable production, which was immediately recognized for its value and received numerous distinctions.

Because of his physical condition, his



FERRAN SUNYER I BALAGUER

"official" and "academically valid" training took place very late. He started his baccalaureate in 1956, when he had already received awards from several Academies, and took his doctorate in 1962, when he had already published more than 20 research articles.

He always felt linked to our country's scientific movement and accepted with humility the limitations imposed on him by his tetraplegia, having received interesting offers from all over the world, especially from the French Recherche and from North-American institutions. He was lucky enough in 1963 to obtain a research contract paid for by the American Navy, which he maintained over the following years, and whose results earned him great praise. "His value to the prestige of the Spanish Scientific community was outstanding and his work in mathematics was of a steady excellence that makes his loss difficult to accept." (From the letter of condolence from T.B. Owen, Rear Admiral of U.S. Navy.)

These successes, obtained in spite of his physical handicaps, demonstrate his human qualities. Indeed, he was always very open in his dealings and his talk was cheerful, reflecting the pleasure he got from life, from work and from making friends, something far more than just accepting and putting up with the difficulties life presented for him.

The Institut d'Estudis Catalans has wanted to honour the memory of Ferran Sunyer i Balaguer, and with the help and collaboration of his cousins, who

took care of him in every possible way until his death, created in December 1991 the Fundació Ferran Sunyer i Balaguer.

Its first public act has been to announce an international award for mathematics open to monographs of an expository nature presenting the latest advances in an active area of research, based primarily on the work of the author.

The prize has two parts: on one hand, an endowment of 200,000 Ecus for the author, and on the other, publication of the work in the series "Progress in Mathematics" of the Swiss publishers Birkhäuser Verlag.

The international scientific committee set up to award the prize is made up of five mathematicians of renown who will analyse the works submitted and propose a winner to the foundation. The prize will be awarded at a public ceremony on 23 April, the day of Sant Jordi (Saint George).

The IEC, Catalonia's most prestigious academic institution, has, since its foundation in 1907, played an important part in the development of the sciences and humanities in our country. Recently organised in five sections, it is devoted to top-level scientific research, especially into all elements of Catalan culture. It takes a particular interest in the language, as recognized by the Catalan parliament's recent law on the institute's linguistic authority.

However, the evolution of this institution over the last ten years has led it to play an important part in other spheres. Thus in 1984 it created the Centre de Recerca Matemàtica, an institute for investigators linked to mathematicians at the Catalan universities, which, thanks to the encouragement of the institute and the support of the Generalitat, has become one of the most prestigious research centres, projecting an image abroad of a country rich in high-quality investigation and at the same time strengthening scientific contacts at the highest levels.

The creation of the Fundació Ferran Sunyer i Balaguer and the announcement of the first edition of the prize of the same name, have made considerable impact on the international mathematical community. These initiatives clarify the answer to the question posed at the beginning: "What is happening in mathematics in Catalonia?". Catalonia has begun to be strong and competitive in mathematics. ■