To the Memory of Javier Chavarriga

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Let the following text give testimony of a life dedicated to mathematics.

Javier Chavarriga coursed his degree in Mathematical Sciences in the Faculty of Mathematics of the Central University in Barcelona during the period 1974–79, with a specialization in Mathematical Analysis, and he obtained his degree in June of 1979. He obtained the Ph.D. in Mathematical Sciences in the same faculty in November of 1985, with the qualification “Apto CUM LAUDE” under the supervision of Dr. Carlos Simó Torres. During the academic years 1979–83 he practised as an assistant professor in the Department of Functional Equations at the University of Barcelona. Many students, today professors, remember that brilliant graduate who gave lessons on ordinary differential equations and who transmitted his energy and enthusiasm towards mathematics, feelings that always characterized him.

He started the academic year 1983–1984 as a professor “Collaborator Teaching and Research Professor” in the Faculty of Computer Science in the Polytechnic University of Catalonia. In November of 1984 he obtains a position as assistant professor in General Mathematics in the Faculty of Pharmacy of the University of Barcelona, where he continues his teaching duties between November of 1984 and June of 1992. In January of 1985 he is designated “Profesor Titular de Universidad interino” of Applied Mathematics. In May of 1987 he obtains by examination a position of “Profesor Titular de Universidad” of Applied Mathematics in the Department of Applied Mathematics and Analysis of the University of Barcelona.

During the 90’s, the Catalan university system suffers a re-structuration. In that moment, there were only three universities in Catalonia with several delegations in the different Catalan regions. With the new system, new universities are created or
restored (this is the case of the University of Lleida) like the University of Girona, the University of Lleida and the University Rovira i Virgili of Tarragona.

His familiar and emotional relations with the Aragon and Catalonia regions, and more precisely with the village of Sena, which is 50 km. away from Lleida approximately, were the reasons why, during this period of changes, he trusted in the University of Lleida, which he would lately feel very proud of.

In this way, in October of 1992, he incorporated in the Mathematical Section of the region called Segrià at the Polytechnic University of Catalonia in the Superior and Technical School of Agronomical Engineers in Lleida. This centre belongs to the University of Lleida from November 1992. In June of 1995 he gets a post as a “Profesor Titular de Universidad” in Applied Mathematics in the Department of Mathematics of the University of Lleida.

From that moment on, we have shared many of his worries and it was in this university where his main contributions in teaching and research were developed. He boosted the brand new born Department of Mathematics of our university where he occupied the post of chief of Department for a long period.

He aimed at creating a research group in dynamical systems; he wanted to spread his knowledge. He started by looking for students. To get his purpose he gave a doctoral course entitled Mathematical Modelling which was followed by several members of our department. Among these, Jaume Giné went on being his first Ph.D. student. This was the initial kernel of our research group. Isaac A. García incorporated in the year 1995.

This initial period was very tough: we still recall that small office of $4m^2$ shared by the three of us in the main building of the university. Big sacrifices mark that time with many time devoted to work. In this period Javier showed his strong virtues that characterized him. His passion and strength allowed him to overcome any difficulty no matter how big it was. His aim for well done work is also very remarkable.

The results of these efforts are evident by the acknowledgement of the members of the international scientific community and at that time the first collaborations take place and research visitors come over. Important collaborations are established both at a national and at an international level. Without wanting to be exhaustive, we would like to mention professors like Héctor Giacomini from the University of Tours, Armengol Gasull and Jaume Llibre from the University “Autònoma de Barcelona”, Mircea Sofo-nea from the University of Perpignan, Laurent Cairó from the University of Orleans, Mijhail Popescu from the Mathematical Institute in Bucarest, Marco Sabatini from the University of Trento, … who were visitors during this initial period.

The research group Seminari de Sistemes Dinàmics was settled and these different collaborations suggested the organization of different workshops and congresses. We remark the Catalan Days on Applied Mathematics and two editions of the Symposium on planar vector fields.

Later on, the group grows with the Ph.D. students Jordi Sorolla and Maite Grau, so that the continuity of the group founded by Javier is ensured.

His research is devoted to continuous dynamical systems and, in particular, in the planar ones. These systems can be thought as ordinary differential equations parameterized by a time variable. His contributions to the centre problem and the integrability problem are remarkable. He also studied issues like isochronous centres, reversibility,