28th SUMMER SCHOOL-CONFERENCE ON DYNAMICAL SYSTEMS
AND COMPLEXITY, CHANIA, CRETE, 18 - 26 JULY 2022

Complexity, Greek Summer Schools and Thanassis Fokas

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When I started thinking about this year's 28th Summer School, nearly four months ago, I thought it should carry a special significance, after a two-year pandemic period, with no event in 2020 and an online 27th Summer School- Conference in 2021, which ended with 2 days dedicated to my 70th birthday.

Our 7-member Organizing Committee, with its accumulated experience of many years, thought that a live event at Chania, July 18 - 26, 2022 was a great idea, especially since Springer had accepted to publish our Proceedings in a special Complexity issue. I thought, however, that we needed an additional incentive: I asked myself whose 70th birthday could we celebrate this year and Thanassis Fokas' name came to mind! I called him, and not only did he happily accept, but also planned the two-day participation of many of his colleagues now scheduled live for July 22 and 23.

I was fortunate, in my career, to have written 3 papers with Thanassis: One on the singularity analysis of chaos in ODEs [1], and two on complexity in neuronal networks [2] and the fractal analysis of paintings by P. Mondrian [3], all originated by his ideas. In my Introduction to this year's event, I will briefly discuss the Science of Complexity and describe Thanassis' participation in many of our Summer Schools to date. In a second talk, on Saturday, I will mention our common work in [3].

We were not able to have a fully live event this year. However, we enjoy two privileges: A great number of many distinguished lecturers speaking on line, and a 3-day live part consisting of two days devoted to Thanassis' life achievements and one on hands-on teaching Machine Learning to selected students. Who knows what wonders await us next year?

References

[1]   A. S. Fokas and T. Bountis, "Order and the Ubiquitous Occurrence of Chaos", *Physica* **A 228**, 236-244 (1996).

[2]   C. Antonopoulos, A.S. Fokas and T. Bountis, "Dynamical Complexity in the C.elegans Neural Network", *E.P J. S. T.*, Vol. 225, No. 6, 1255–1269 (2016).

[3]   T. Bountis, A.S. Fokas and E. Psarakis, "Fractal Analysis of Tree Paintings by Piet Mondrian (1872 – 1944)", *Intern. J. of Arts and Technology*, Vol. 10, No. 1, 27-42 (2017).