In memory of Raymond Stora.

In these few lines, I would like to describe how Raymond opened for me the gates of research in a domain at the common boundary of mathematics and physics, namely
1) the analytic functions of several complex variables and
2) the properties of scattering functions in the general axiomatic framework of Quantum Field Theory(QFT).
I had the privilege to meet Raymond at the "Service de Physique Mathématique" (SPM) of Saclay in 1958   after having followed in that place, the beautiful course of Quantum Mechanics by Albert Messiah. While the common interest in the SPM was mainly oriented towards low-energy nuclear physics, the arrival of Raymond from United States opened the range of interest to Quantum Field Theory in the SPM. In fact, the big challenge at that time was how to treat high-energy scattering functions of particles described by strongly interacting fields, i.e. when the size of the coupling constant forbids the use of
Feynman-type perturbative expansions.
So there appeared the necessity of treating the Quantum Fields as mathematically well-defined objects in a certain axiomatic framework. In the latter, essential ingredients were the Hilbert-space structure of quantum mechanics together with relativistic invariance and appropriate stability conditions.
From the mathematical viewpoint, it appeared that the theory of analytic functions of several complex variables played a fundamental role in the properties of off-shell scattering amplitudes and that in the best cases, one could establish Cauchy-type integral relations, called "dispersion relations" between the "dispersive" (i.e. real) and "absorptive" (i.e. imaginary) parts of the on-shell scattering amplitudes. When I met him in Saclay, Raymond was very interested in the geometrical concepts in complex space, such as "holomorphy envelopes", which had direct applications to the off-shell scattering amplitudes.
This interest was shared by Marcel Froissart and Roland Omnès in Saclay where a specialist of complex variables (P. Lelong) was invited to give a series of lectures.
Thanks to the helpful explanations given by Raymond about the recent axiomatic formulations of QFT, I got myself involved in a very nice geometrical work. This led to a joint paper by B.F.O.S called 'New techniques in the proof of dispersion relations' which unfortunately remained unpublished. As a matter of fact, these results were scattered in three publications, namely two summer school courses (R. Omnès: les Houches 1960 and
M. Froissart: Varenna 1961) and a paper in the Journal of Mathematical Physics which I co-signed with A. Messiah and R. Stora (1961)

Thanks to Raymond Stora, I had the great honour, being 27-year-old (in 1962)
to meet Jurko Glaser at CERN. This was the starting point of a several year collaboration between Glaser, Raymond Stora, Henri Epstein and myself, about
"the analyticity properties in Quantum Field Theory".

I would not end these lines without mentioning the great human qualities of Raymond in particular   his generous friendship. …for me a personal remembrance: Raymond lent me his flat in Orsay, in a difficult part of my life when I had familial difficulties.

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