Note di Matematica Note Mat. **32** (2012) n. 1, 5–6.

Birthday celebration speech for Professor Constantine Dafermos

T. Ruggeri

Department of Mathematics & Research Center of Applied Mathematics, University of Bologna, Via Saragozza 8, 40123 Bologna, Italy. tommaso.ruggeriQunibo.it

The WASCOM 2011 Conference had the honour of marking the 70th birthday of Professor Costas Dafermos, great scientist and wonderful friend. Costas was born in Athens in 1941 where he was trained as a civil engineer receiving a diploma from the National Technical University of Athens in 1964. In 1967 he received a Ph.D. in Mechanics from the Johns Hopkins University under the direction of Jerald Ericksen. Since 1971, is a professor at Brown University in Providence, where he spent his entire career.

Costas was awarded the SIAM W.T. and Idalia Reid Prize in 2000 for his contribution in the area of differential equations and the Cataldo e Angiola Agostinelli Prize from the Accademia dei Lincei in 2011 for his work on interactions between Mechanics and Mathematical Analysis. He was elected to be a Fellow of the American Academy of Arts and Sciences in 2001 and a Foreign Member of the Accademia Nazionale dei Lincei in 2011.

Costas gave fundamental results in the field of partial differential equations of hyperbolic type in which he was able to combine a deep mathematical rigor with a deep understanding of physical reality. In particular, he is studying the interplay between thermodynamics and analysis in the theory of these systems and he is analyzing the fundamental role of entropy on the solutions. This ability to put togheter arguments of analysis with arguments of thermomechanics is also due maybe to his original studies in Mechanics. His book "Hyperbolic Conservation Laws in Continuum Physics" is the best example of the Costas point of view of the interplay between Continuum Mechanics and Mathematics. This is a definitive work to understand the role of thermodynamics in the systems of conservation laws arising in continuum mechanics.

Costas has done a lot for Mathematical Physics in Italy. He has been a "fixed

http://siba-ese.unisalento.it/ © 2012 Università del Salento

T. Ruggeri



point" for the Wascom conference and he has lectured in Ravello in 1989, 1993 and 1996. Many italian reserachers have learnt a great deal from him during his visits to Italy and not only. A true "gentleman scientist" to wich all of us have to say thank you very much.

Tommaso Ruggeri