Preface

This volume contains research papers based on lectures delivered at «The Fano Conference», organized by the Dipartimento di Matematica dell'Università degli Studi di Torino to commemorate the 50th anniversary of the death of Gino Fano (1871-1952) and held in the conference centre of Torino Incontra from 29th September to 5th October 2002. During the Conference, which was attended by 147 mathematicians from all over the world, 48 lectures were delivered. We tried to invite all the mathematicians who gave in recent years outstanding contributions to the theory and classification of Fano varieties, and we were particularly glad that most of them were able to accept our invitation.

Gino Fano spent all his academic life in the Università degli Studi di Torino, where he created, in a long series of papers going from 1904 to 1950, the theory of «varietà algebriche tridimensionali a curve sezioni canoniche», by now defined as «3-dimensional algebraic varieties whose anticanonical system is ample» and named after him. This class of varieties aroused a keen interest starting from 1970, when the non-rationality of the cubic and of the quartic threefolds was proved respectively by Clemens and Griffiths and by Manin and Iskovskikh, and from that year on a lot of research work was done on them. During the Fano Conference, on 2nd October, a solemn academic ceremony was held in the Aula Magna of the Università degli Studi to confer the «lauree honoris causa in Matematica» awarded by the Facoltà di Scienze Matematiche, Fisiche e Naturali to Herbert C. Clemens, Vasilij A. Iskovskikh, Shigefumi Mori and Jacob P. Murre for their outstanding contributions to the theory and classification of Fano Varieties.

Robert (Bob) Fano, the second and only surviving son of Gino, now an emeritus professor of Electrical Engineering and Computer Science of the Massachussets Institute of Technology, was kind enough to supply us with a memorial of his father, based also and recollections of his elder brother Ugo, formerly a professor of Physics at the University of Chicago, which was read during the opening ceremony of the Conference and that we are very happy to publish in this volume. Bob supplied also us with nice photographs of his father, which were showed, among other items kept in the archives of the Università degli Studi di Torino, at the Exhibition «Gino Fano and His Pioneering Work in Algebraic Geometry» held in Torino Incontra during the time of the Conference.

We want to thank warmly Prof. Rinaldo Bertolino, Rector of the University

A. N. Tyurin, who had been one of the most active speakers and participants, suddenly died in Bonn at the end of October 2002. The manuscript of his talk was found among his papers by his son Nikolay and edited by Arthur Greenspoon. We are therefore able to publish it in these Proceedings, which we ideally dedicate to the memory of this great friend and oustanding specialist of Fano varieties.

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ALBERTO COLLINO
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