

MATERIAL AND NON-MATERIAL HERITAGE OF THE ITALIAN SCHOOL OF ALGEBRAIC GEOMETRY (1880-1950)

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The aim of this talk is to provide a global vision over a long period of the Italian School of algebraic geometry – a social group of primary importance for the history of mathematics in Italy – through the adoption of the ‘heritage’ investigation lens. In a continuous dialogue with the past, through a significant scientific legacy, many modern achievements feed their roots in such cultural ground, which hence deserves to be considered more closely in the light of the ‘process of patrimonialization’. This conception implies a dynamic vision of mathematical knowledge and leads to a synthesis of a plurality of elements, based on the reconstruction of a link with the past but also recognised today as an integral part of our mathematical culture. The heritage point of view encompasses material and immaterial aspects, providing a unified vision of the Italian geometric tradition. The ‘material’ lens of inquiry is deeply rooted in the concept of the ‘material culture of science’, which invites to shift the focus on material sources of scientific endeavours. In the case of the Italian School, it appears therefore relevant the study of institutional and private book heritages. As regards the first, the library assets (personal library and miscellany) of C. Segre, G. Fano and A. Terracini are analysed, revealing the existence of a common culture and a set of readings shared between the members of the School. Moving to the second aspect, it is worth considering the university libraries of the main Italian centres of research in algebraic geometry (Rome and Turin), delving into the different forms of use and management and their role as centres of production, preservation and transmission of mathematical knowledge. As regards the ‘non-material’ heritage – which includes the circulation of issues, problems, theorems and methods, the commonality of research themes and mathematical practices, and the phenomena of ‘mathematical sociability’ – at least three aspects have to be examined: research, teaching and divulgation. Taking into account also unpublished documents and manuscripts – through which the material and non-material dimensions intertwine – and exploiting the potentialities of digital humanities softwares to manage complex data networks, it is possible to shed a new light on the group of Italian algebraic geometers, made up not only by outstanding mathematicians, but conceived as a community of mathematical practice, a *communauté savant*, characterised by specific heritage, shared culture and traditions, epistemological and linguistic patterns.

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