PHILMATHMED 5 (2022)

Géométrie et logique
31 Mars-1 Avril 2022
Sala Orsi, Dipartimento di Matematica, Università di Torino
Via Carlo Alberto, 10, 10123 Torino TO

Jeudi 31 mars 2022

9h00   Accueil

9h30 -10h45   Arnaud BEAUVILLE (Nice), *The return of classical algebraic geometry*

11h00-12h15 Elena SCALAMBRO (Torino), *Alle radici delle ricerche sulle Fano-Enriques threefolds in geometria algebrica*

12h30-14h00   Pause

14h00-15h30   Silvia DE BIANCHI (Milano), *Weyl on gravitation and metrical field: philosophy and mathematics in* Raum-Zeit-Materie

16:00-18:00 Table ronde animée par Francesca BIAGIOLI, Paola CANTU et Frédéric PATRAS

Vendredi 1 avril 2022

9h30-10h45   Claudio BARTOCCI (Genova), *Insight and heuristics: the emergence of Poincaré's conjecture*

11h00-12h15   Erika LUCIANO (Torino), *The sociological singularity of the Peano School: Mathematics Education and Foundational Research*

12h30-14h00   Pause14h00-15h15   Massimo GALUZZI (Milano), F*ederigo Enriques: storia e filosofia della matematica in Italia nel Novecento*

15h30-16h45 Farhang HADAD-FARSHI (Milano/Barcelona), *Algebra and the phenomenon of time*

17h00-18h00 Animation du reseau PHILMATHMED

Comité d'organisation : Francesca BIAGIOLI (Torino) e Erika LUCIANO (Torino)

Le langues du workshop seront français, italien et anglais.

Co-organisation du réseau et des rencontres PHILMATHMED : Paola CANTU (CNRS – Université Aix-Marseille), Thomas HAUSBERGER (Université de Montpellier), Sébastien MARONNE (Université de Toulouse), Frédéric PATRAS (CNRS – Université Cote d'Azur)

Résumés

Arnaud BEAUVILLE, *The return of classical algebraic geometry*
Algebraic Geometry has been revolutionized in the mid-1950s by Grothendieck. While he developed a rather abstract approach, oriented towards arithmetic geometry, another trend emerged gradually, aiming to apply the new methods to classical problems. After a brief historical overview, I will describe my personal journey in the subject, starting as a student of the Grothendieck school and switching to a more concrete point of view.

Elena SCALAMBRO, *The roots of research on Fano-Enriques threefolds in algebraic geometry. Alle radici delle ricerche sulle Fano-Enriques threefolds in geometria algebrica*
The aim of this talk is to investigate Gino Fano's contributions to the study and classification of a special class of three-dimensional algebraic varieties: the so-called Fano-Enriques threefolds (i.e. Fano threefolds whose general hyperplane section is an Enriques surface). We analyse his 1938 memoir from an historical-critical perspective, also in the light of its quite limited reception at that time and the subsequent rediscovery in the 1980s. Besides the weak links with foreign mathematical traditions, we consider the positioning of Fano's work in the Italian geometric context. Starting from this case-study, we discuss some distinctive features of the 'late' Italian School of algebraic geometry which affected its decline.

Erika LUCIANO, *The sociological singularity of the Peano School: Mathematics Education and Foundational Research*
The Peano School is the only non academic-based group in the international panorama, consisting mainly of middle and secondary school teachers (37 out of 42 members, with a very peculiar gender balance). This fact is relevant both from the point of view of the collective working practices that were established in the group, and from that of the specificity of the School's research program. In this talk we will show that the sociological singularity of the Peano School corresponds to a unique educational project, deeply intertwined with the mathematical, philosophical, logical and linguistic views of the group, and which had non-negligible effects on the evolution of mathematical teaching in Italy, and beyond.

Massimo GALUZZI, *Federigo Enriques: storia e filosofia della matematica in Italia nel Novecento*
L'indubbia grandezza di Federigo Enriques, come matematico e come filosofo, largamente riconosciuta ed apprezzata nell'ambito scientifico, non ha un pari riscontro nella più generale "cultura", specialmente in Italia. Nel caso italiano, ovviamente, questa situazione è anche dovuta al permanere di molte idee del neoidealismo. Ma alcune cause si trovano anche nell'opera stessa di Enriques. Definito spesso un "mediocre lettore" era assai insofferente verso la storia erudita. Inoltre, pur essendo egli assai modesto estimatore di Hegel, è difficile negare una marcata caratteristica hegeliana del suo modo di presentare la storia. In questo intervento cercherò di porre in evidenza alcuni aspetti critici dell'opera di Enriques che, con lievi integrazioni o modi che, potrebbero portare ad un più sereno apprezzamento della sua opera, in particolare nell'ambito filosofico. Un'ampia bibliografia sarà data successivamente al termine dell'intervento.