

The Galileo Galilei Institute For Theoretical Physics

Centro Nazionale di Studi Avanzati dell'Istituto Nazionale di Fisica Nucleare

Arcetri, Firenze



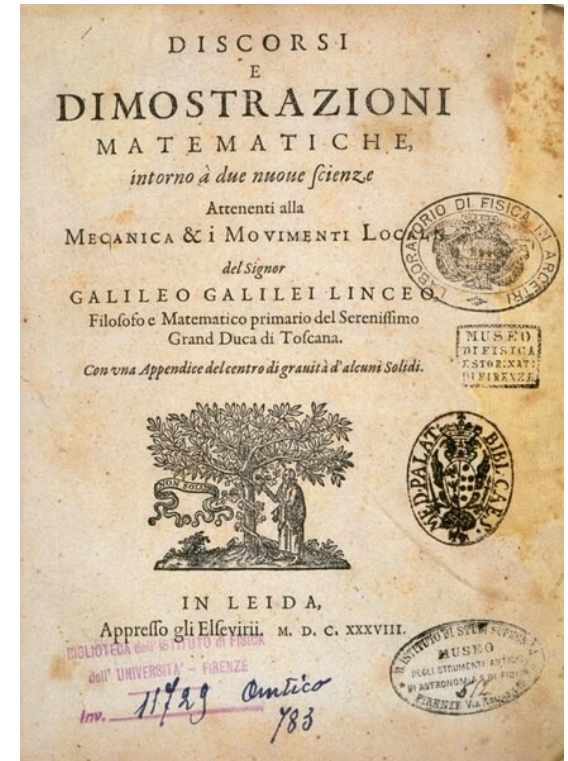
The Hill of Arcetri



Villa Il Gioiello



where Galileo spent the last eleven years of his life





Architetto GINO MARCHI - Impresa Costruttrice GIOVANNI LAZZERI

Present Department of Physics and Astronomy, which dates back to one century ago (1921). It is named after his founding father **Antonio Garbasso**, who created a high level school of physics for the following decades, with pioneering groups in

Quantum mechanics

Cosmic ray physics and astrophysics

Optics

Enrico Fermi worked here during 1925 and 1926



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Zur Quantelung des idealen einatomigen Gases¹⁾.

Von E. Fermi in Florenz.

(Eingegangen am 24. März 1926.)

Wenn der Nernstsche Wärmesatz auch für das ideale Gas seine Gültigkeit behalten soll, muß man annehmen, daß die Gesetze idealer Gase bei niedrigen Temperaturen von den klassischen abweichen. Die Ursache dieser Entartung ist in einer Quantelung der Molekularbewegungen zu suchen. Bei allen Theorien der Entartung werden immer mehr oder weniger willkürliche Annahmen über das statistische Verhalten der Moleküle, oder über ihre Quantelung gemacht. In der vorliegenden Arbeit wird nur die von Pauli zuerst ausgesprochene und auf zahlreiche spektroskopische Tatsachen begründete Annahme benutzt, daß in einem System nie zwei gleichwertige Elemente vorkommen können, deren Quantenzahlen vollständig übereinstimmen. Mit dieser Hypothese werden die Zustandsgleichung und die innere Energie des idealen Gases abgeleitet; der Entropiewert für große Temperaturen stimmt mit dem Stern-Tetrodeschen überein.



During the Sixties **Raoul Gatto** Director of the
Institute of Theoretical Physics

Founding a school of theoretical physics with several young
fellows

to cite just few famous names,
Guido Altarelli, Luciano Maiani, Gabriele Veneziano

Given the history and importance of the various research institutions, **in 2013 the Hill of Arcetri** has been declared

**historical site
of the European Physical Society**

The Galileo Galilei Institute

Established in **2006** thanks to a **partnership between INFN and University of Florence**
Since 2018 it has become a National Center (independent from the INFN Florence Unit) for Advanced Studies

It has been the **first european center dedicated to extended workshops** on the most advanced topics in **theoretical physics**, following the model of the **KAVLI Institute** in Santa Barbara

More recently (since 2014) also **topical schools in theoretical physics for PhD students**

Laces: Advances Lectures on Fields and Strings
Theory of Fundamental Interactions
Lectures on Statistical Field Theories
Frontiers in Nuclear and Hadronic Physics
Astroparticle Physics, Cosmology and Gravitation

Most recent one, introduced in 2023: **Theory meets Experiment**,
50% theorists and 50% experimentalists, dedicated to an hot topic in current INFN research,
requiring the synergy between of next generation of theorists and experimentalists

**Enjoy the workshop, GGI and
Florence!**