THE ENRICO FERM I INSTITUTE

Director

• Edward Blucher, Physics

Professors

• Edward Blucher, Physics
• John Eric Carlstrom, Astronomy & Astrophysics
• Cheng Chin, Physics
• Fred Ciesla, Geophysical Sciences
• Juan Collar, Physics
• Nicolas Dauphas, Geophysical Sciences
• Andrew Davis, Geophysical Sciences
• Henry J. Frisch, Physics
• Jeffrey A. Harvey, Physics
• Craig Hogan, Astronomy & Astrophysics
• Daniel E. Holz, Physics
• Wayne Hu, Astronomy & Astrophysics
• Young Kee Kim, Physics
• Edward W. Kolb, Astronomy & Astrophysics
• Andrey Kravtsov, Astronomy & Astrophysics
• David Kutasov, Physics
• Emil J. Martinec, Physics
• Sidney Nagel, Physics
• Angela Olinto, Astronomy & Astrophysics
• Mark J. Oreglia, Physics
• Paolo Privitera, Astronomy & Astrophysics
• Robert Rosner, Astronomy & Astrophysics
• Savdeep Sethi, Physics
• Melvyn Shochet, Physics
• Dam Thanh Son, Physics
• Abigail Vieregg, Physics
• Carlos Wagner, Physics
• Yau W. Wah, Physics
• Scott P. Wakely, Physics
• Robert M. Wald, Physics
• Liantao Wang, Physics
• Paul B. Wiegmann, Physics

Associate Professors

• Damiano Capeioli, Astronomy & Astrophysics
• Luca Grandi, Physics
• David W. Miller, Physics
• David Schmitz, Physics

Assistant Professors

• Clay Córdova, Physics
• Karri DiPetrillo, Physics
• Keisuke Harigaya, Physics

Part-Time Faculty

• Marcela Carena, Professor of Physics (part-time with Fermilab)
• Bonnie T. Fleming, Professor of Physics (part-time with Fermilab)
• Kwang-Je Kim, Professor of Physics (part-time with Argonne)
The Enrico Fermi Institute (http://efi.uchicago.edu/) is a Physical Sciences unit of the University devoted to interdisciplinary research. It was founded shortly after the Second World War as the "Institute for Nuclear Studies" and is now named in honor of Enrico Fermi, who was one of the founders and a distinguished member of the Institute. All faculty members in the Institute hold joint appointments in one or more of the following departments: Physics (http://physics.uchicago.edu/), Astronomy and Astrophysics (http://astro.uchicago.edu/), Chemistry (http://chemistry.uchicago.edu/), Geophysical Sciences (http://geosci.uchicago.edu/), and Mathematics (http://math.uchicago.edu/). Graduate students and postdoctoral scholars working with these faculty members also hold appointments and perform their research in the Institute.

The experimental disciplines currently being pursued include: high-energy particle physics, high-energy astrophysics, studies of particles and fields in the solar system and in space, infrared and optical astronomy, nuclear cosmo-chemistry, geochemistry, scanning electron and proton microscopy, the dark energy search, and solar energy concentration. Theoretical studies include physics of elementary particles, quantum field theory, theoretical astrophysics and solar physics, plasma physics, cosmology, and general relativity.

The Enrico Fermi Institute provides engineering, technical and administrative support for the academic members and students. It includes a state-of-the-art electronics development group and facilities for mechanical design and construction, as well as computational equipment. Special resources include environmental test equipment, large-scale assembly facilities, computer aided design facilities, etc. This makes possible the design of complex instruments, and the in-house construction of detectors needed for experiments in the laboratory, with high-energy particle accelerators, on high-altitude balloons, and in space shuttle. Most of the high-energy physics activity is focused on the Fermi National Accelerator Laboratory (http://www.fnal.gov/) ("Fermilab"), one hour’s driving distance from the campus, but experiments are also planned and prepared for the LEP/LHC facility at CERN in Geneva, Switzerland. The Enrico Fermi Institute annually awards Enrico Fermi, Robert R. McCormick, and Mafalda & Reinhard Oechme Postdoctoral Fellowships on a worldwide competitive basis to recent Ph.D. recipients in astronomy, chemistry, physics, or planetary sciences. In addition, the KCTP awards Leo Kadanoff Postdoctoral Fellowships to researchers in theoretical physics. The purpose of these fellowships is to enable young scientists to work either independently or in close association with present members of the Institute in areas of mutual interest. The intellectual life in the Institute is enhanced by frequent visitors, Visiting Scholars and Distinguished Visiting Professors. The Institute also sponsors a popular Saturday morning public lecture series in the autumn and spring quarters, The Arthur H. Compton Lectures. The lectures were suspended in 2020 due to the pandemic, but it is hoped they will be able to resume either in autumn 2022 or spring 2023.

Chicago Pile No. 1 (CP-1) was constructed in a makeshift laboratory under the grandstands of Stagg Field Stadium on the University of Chicago campus. It was here that Enrico Fermi and his colleagues achieved the first self-sustaining controlled release of nuclear energy on December 2, 1942. In 1965, the site was designated
a registered national historic landmark. The University celebrated the 75th-anniversary of this achievement in autumn 2017.