NYU SHANGHAI PHYSICS

NYU Shanghai is home to a vibrant physics program that offers undergraduate and graduate degrees in physics. The program is designed to provide students with a strong foundation in theoretical and experimental physics, preparing them for careers in academia, industry, or government.

**Undergraduate Studies**

NYU Shanghai offers a unique undergraduate program that allows students to explore the many facets of physics. The curriculum is designed to be flexible, allowing students to pursue their interests in areas such as quantum mechanics, condensed matter physics, and astrophysics.

**Graduate Training**

NYU Shanghai offers rigorous graduate programs in physics, including a Ph.D. program and a Master's program. These programs are designed to prepare students for careers in research and teaching.

**Research**

The Institute of Physics at NYU Shanghai is a collaborative research institution that brings together scientists from NYU and East China Normal University (ECNU) to conduct cutting-edge research in areas such as condensed matter physics, quantum information, and atomic and molecular physics.

**Highlights of the Program**

- ** Faculty members include experts in a wide range of fields, including condensed matter physics, quantum information, and atomic and molecular physics.
- ** Access to state-of-the-art research facilities, including a laser-pumped quantum memory and a novel atomic clock.
- ** Opportunities for collaboration with other research institutions, including the University of Chicago and the University of California, Berkeley.

**Master's Program**

The Master's program in physics at NYU Shanghai is designed to provide students with a strong foundation in physics and an opportunity to conduct research under the guidance of experienced faculty.

**Ph.D. Program**

The Ph.D. program in physics at NYU Shanghai is designed to prepare students for careers in research and teaching. Students are expected to conduct original research and contribute to the advancement of knowledge in their field.

**Financial Support**

Students in the NYU Shanghai physics programs are eligible for a range of financial support options, including need-based grants, teaching and research assistantships, and fellowships.

**Application Process**

Applications for both the Master's and Ph.D. programs are available online. Students are encouraged to apply early, as the program is highly selective.

**Contact Information**

For more information, please visit the NYU Shanghai Physics website or contact the department directly.

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**Institute of Physics at NYU Shanghai**

The Institute of Physics at NYU Shanghai is a collaborative research institution that brings together scientists from NYU and East China Normal University (ECNU) to conduct cutting-edge research in areas such as condensed matter physics, quantum information, and atomic and molecular physics.

**Research Areas**

- **Conductivity and superconductivity**
- **Quantum information and quantum computation**
- **Raman spectroscopy and related techniques**
- **Cold atoms and quantum gases**
- **Ultrafast spectroscopy and nanophotonics**
- **Optical and electronic properties of materials**

**Collaborations**

The Institute has strong ties with leading research institutions around the world, including the University of Chicago, the University of California, Berkeley, and the National Institute of Standards and Technology.

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**NYU Shanghai Physics Program**

The NYU Shanghai Physics Program is designed to provide students with a strong foundation in physics and an opportunity to conduct research under the guidance of experienced faculty.

**Curriculum**

The curriculum is designed to be flexible, allowing students to pursue their interests in areas such as quantum mechanics, condensed matter physics, and astrophysics.

**Research Opportunities**

Students in the NYU Shanghai physics programs have access to a range of research opportunities, including collaborations with other research institutions, such as the University of Chicago and the University of California, Berkeley.

**Financial Support**

Students in the NYU Shanghai physics programs are eligible for a range of financial support options, including need-based grants, teaching and research assistantships, and fellowships.

**Application Process**

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**Contact Information**

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Student Internship Opportunities: SRPP

The NYU-ECNU Institute of Physics at NYU Shanghai provides a number of research experiences for students everywhere. One such program is the NYU Shanghai Summer Undergraduate Research Experience Program in Physics (SRPP). SRPP is designed to foster entry into physics research-centered careers for highly motivated undergraduate students with a strong interest in such fields as physics, related scientific disciplines, and mathematics. Students are matched to faculty primarily on the basis of their background preparation and areas of interest.

Students are matched to faculty primarily on the basis of their background preparation and areas of interest. They work either with faculty or with postdoctoral fellows or with graduate students as appropriate. Each student conducts a research project under the direction of his or her mentor.

The periodic flapping motion of the tandem flags is revealed by a visible interference pattern. This pattern is sensitive to different phases and amplitudes.

Education:
- Ph.D., Mathematics, Courant Institute, New York University
- B.S., Physics, Peking University

Research Interests:
- Applied Mathematics
- Fluid Dynamics
- Soft Matter Physics

Homepage Link: https://math.nyu.edu/~jinzi/

Assistant Professor of Mathematics, NYU Shanghai

Email: machuang@nyu.edu

Professor Byrnes' research interests are in quantum information technologies, condensed matter physics, and AMO (atomic, molecular, optical) physics. Specifically, he is interested in theoretical and experimental applications of Bose-Einstein condensed matter. Byrnes received his Ph.D. in Physics from Yale University in 2012 and his B.S. in Physics from Peking University in 2004.

Jun Zhang is a Professor of Physics and Mathematics at NYU Shanghai and at NYU's campus in New York City. Since 2001 he has been the Co-Director of the Applied Math Laboratory in the Courant Institute of Mathematical Sciences. He holds a Ph.D. in physics from the Niels Bohr Institute at the University of Copenhagen. He is a life member and an elected Fellow of the American Physical Society (APS).

Hanghui Chen is an Assistant Professor of Physics at NYU Shanghai. Prior to joining NYU Shanghai, he was a postdoctoral fellow at the Joint Physics Lab at NYU-ECNU Institute of Physics. He holds a Ph.D. from the University of New South Wales in Sydney, Australia.

Pilkyung Moon is Assistant Professor of Physics at NYU Shanghai. He is also a co-PI at the Center of Quantum and Topological Systems at NYU Abu Dhabi. He holds a PhD from Seoul National University, 2009.