Wilczek Quantum Center

Zhejiang University of Technology

Hangzhou, China

Our quantum future, now at ZJUT

Founded in October 2014

The Wilczek Quantum Center is a new initiative, aiming to become an international platform for scientific research, training, and exchange in fundamental quantum physics. Founded in October 2014 on the scenic Pingfeng campus of Zhejiang University of Technology in Hangzhou, it is named after noted American scientist Frank Wilczek, winner of the 2004 Physics Nobel Prize.

Quantum physics, first discovered in the early 1900s, reveals nature's deepest and most mysterious laws. Quantum ideas gave birth to electronic and other technologies that now shape our world. New discoveries in quantum theory continue to yield results that will shape our society for the new century and beyond.

The general purpose of the Center is to advance the level of fundamental research in Hangzhou and to promote scientific exchange and collaboration with the World.

At the initiative phase, the Center directs its main efforts to theoretical research in the areas of

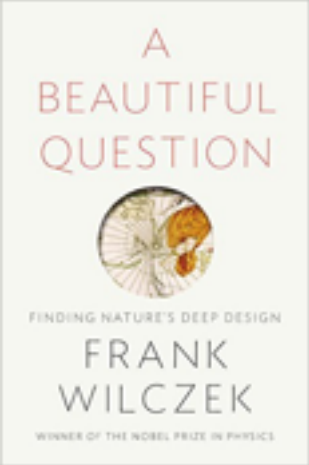
- ultracold gases and quantum optics, where fundamental issues in quantum theory can be addressed cleanly
- quantum information theory, simulation, and visualization
- the theory of fundamental interactions and its applications to astronomy and cosmology
- the application of quantum mechanics to biological processes, including the molecular basis of perception

The Center also plans to reach out to the wider public, through cultural events, and to look for appropriate opportunities to support interdisciplinary and technological ventures.

Our goal is to develop the Center into an institution recognized worldwide, working at the cutting edge of quantum research frontiers.

Professor Frank Wilczek (2004 Nobel Laureate in Physics) is the Center's Chief Scientist appointed by the University, directly overseeing the development and operation of the Center.

https://en.wikipedia.org/wiki/Frank_Wilczek
http://web.mit.edu/physics/people/faculty/wilczek_frank.html
http://frankwilczek.com



We can provide golden chance to discuss many beautiful questions with Frank Wilczek at WQC. Are you ready?

Present Members at WQC

Five professors (two Qiangjiang Scholar Professors)

+4 National "High End Foreign Experts Program" Adjunct Professors
Chief Scientist: Professor Frank Wilczek (2004 Nobel Laureate)

Two postdocs: one from University of Cambridge/University of Birmingham, one from Peking University.

One lecturer from Tsinghua University.

The official website is under construction. Some further informations can be found in

http://wqchina.org

Recruiting Plan for Faculty Members

We want to recruit **10-15** more faculty members in the next 5 years.
We hope to have a faculty of 25 to 30 after 10 years. Please contact us without any hesitation.
wqcsearch@zjut.edu.cn

Postdocs Recruiting Plan

Postdocs are an important part of WQC. They interact both with our excellent faculty and with the students of ZJUT. These postdocs will be very valuable for the future of physics in China, because they will come to ZJUT and later take this new quantum training to many different universities in China and abroad.

Visitor Program

We want to develop a vibrant visitor program by bringing outstanding scholars to ZJUT. This will promote **international exchange and development**, benefiting both sides.
Another important goal is to **bring science to the general public, through public scientific and social events**. We plan to bring major figures to give public lectures about quantum physics—not only top scientists like Frank Wilczek but also business leaders whose products are based on quantum mechanical innovations.

Visiting Professors

WQC's four Visiting Professors (alphabetical order)

Andreas Hemmerich, Visiting Professor of WQC and High-End Foreign Expert of China
Andreas Hemmerich is an experimental physicist and professor at the Institute for Laser Physics at Hamburg University in Germany.

Cristiane Morais Smith, Visiting professor of WQC and High-End Foreign Expert of China
Cristiane Morais Smith is a theoretical physicist and a professor of condensed matter physics at Utrecht University in the Netherlands.

Boris Svistunov, Visiting Professor of WQC and High-End Foreign Expert of China
Boris Svistunov is Professor of Physics at the University of Massachusetts (Amherst) in the US.

Biao Wu, Visiting Professor of WQC and Yunhe-Scholarship Professor of ZJUT
Biao Wu is a Changjiang Scholar Professor at Peking University's International Center for Quantum Materials.

China's "High-End Foreign Experts" (HEFE) program, administered by the State Administration of Foreign Experts Affairs (SAFEA,) approved and gave financial support to WQC for the visits of Andreas Hemmerich, Cristiane Morais Smith, Boris Svistunov, and Frank Wilczek.

The Location of WQC

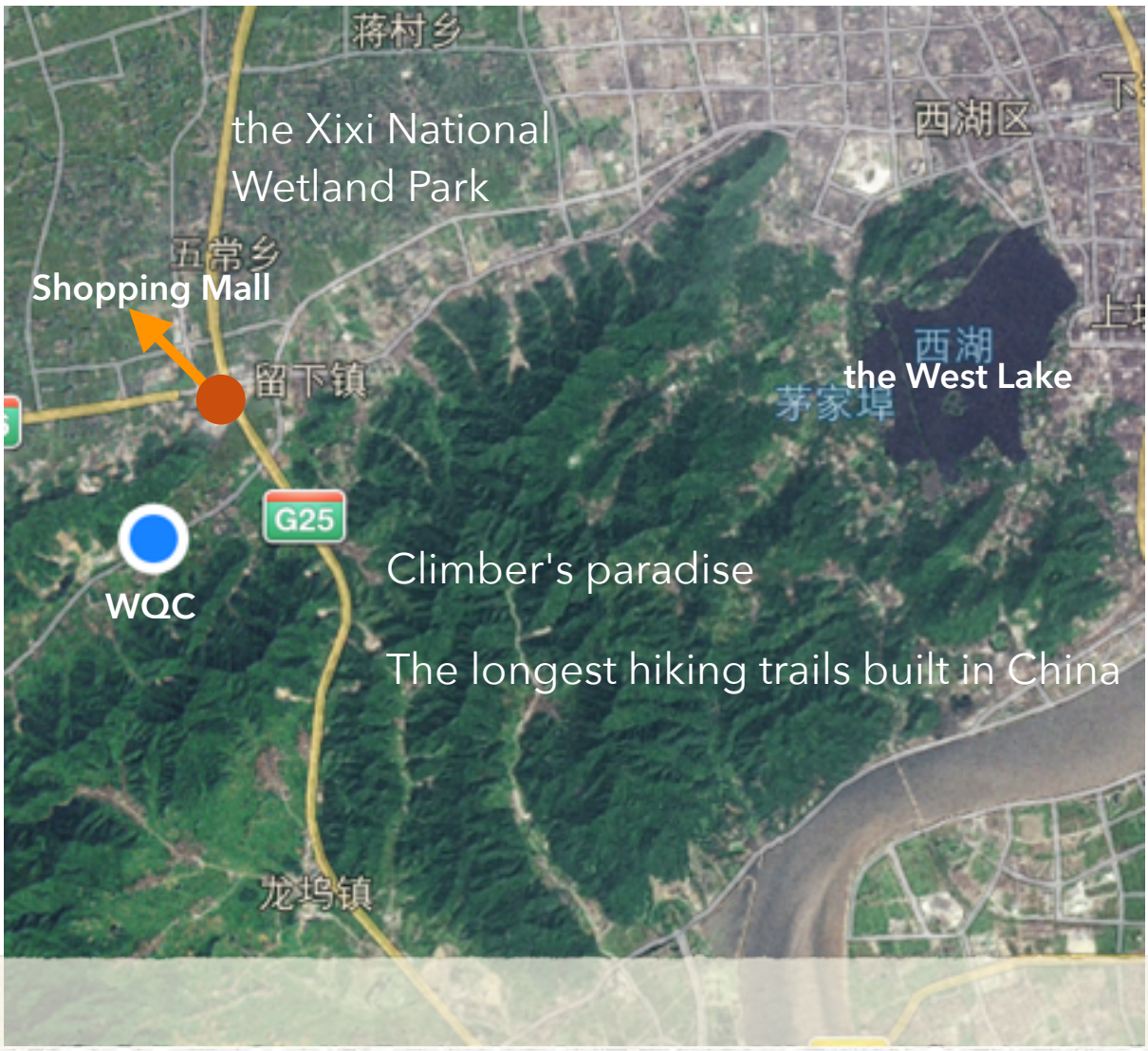
The Wilczek Quantum Center is located in Hangzhou, one of the most beautiful cities in China. Hangzhou is very close to Shanghai, which makes it convenient for international travels. However, as one of the world's most famous tourist cities, Hangzhou is much more comfortable than other big cities.

http://en.wikipedia.org/wiki/Hangzhou

Hangzhou is renowned for its historic relics and natural beauty. It is known as one of the most beautiful cities in China, also ranking as one of the most scenic cities. Although Hangzhou has been through many recent urban developments, it still retains its historical and cultural heritage. Today, tourism remains an important factor for Hangzhou's economy. One of Hangzhou's most popular sights is West Lake, a UNESCO World Heritage Site. The West Lake Cultural Landscape covers an area of 3,323 ha (8,210 acres) and includes some of Hangzhou's most notable historic and scenic places.

"Heaven Above, Suzhou and Hangzhou below."
(simplified Chinese: 上有天堂，下有苏杭）

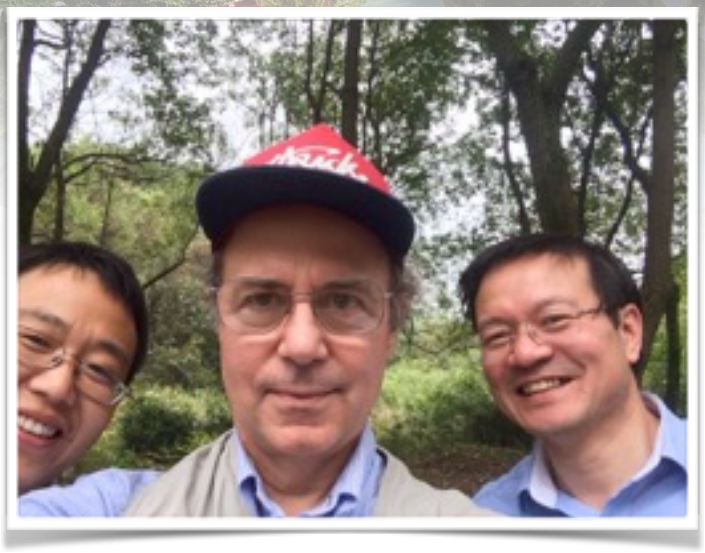
Google Map



Xixi National Wetland Park (Chinese: 西溪国家湿地公园) is a national wetland park in China, located at the west part of Hangzhou, Zhejiang province, a total of 1,150 hectares (2,800 acres). The park is densely crisscrossed with six main watercourses, among which scatter various ponds, lakes and swamps. XiXi Wetland has a history of more than 1,800 years and an abundant cultural heritage. It's the original site of Chinese South Opera; it has a traditional Dragon Boat Contest; it contains the vivid life of a water village, featuring silkworm feeding and silk production.

WQC is situated on the scenic Pingfeng campus of ZJUT. This is one of the most beautiful campuses in China, with very clean air surrounded by mountains. It takes only ten minutes for one to enter the highway, connecting the airport and other cities.

The amazing plan of the future building of WQC!



WQC is warmly welcoming your amazing adventure in the mysterious quantum world, together with Frank Wilczek and many young geniuses.

There is one more amazing thing because of **YOU**