TSINGHUA WEEK AT UC BERKELEY
April 5–7, 2010
The University of California, Berkeley welcomes faculty, administrators, and students from Tsinghua University to campus for “Tsinghua Week at UC Berkeley 2010.” Tsinghua University, a top-tier comprehensive research university in Beijing, China, has sent faculty members, administrators, staff, and students to Berkeley to participate in events and activities designed to promote research and learning at both universities. Areas of exchange range from science and engineering to architecture, philosophy, history, public policy, social welfare, and higher education. During the three-day event, departments, schools, and research units on the Berkeley campus will serve as sites of synergy and discussion designed to bridge research and learning across the Pacific and to strengthen ties between the two universities. Student events will highlight university life on both campuses and encourage cultural exchange.

Tsinghua Week events are hosted by the Office of the Chancellor and organized and staffed by the Institute of East Asian Studies. Co-organizers include: Banatao Institute @ CITRIS Berkeley, Center for Studies in Higher Education (CSHE), College of Engineering, Department of Architecture, Department of Physics, Department of Psychology, Goldman School of Public Policy, Partners for Advanced Transit and Highways (PATH).

All academic panels are free and open to the public. Join us for three days of stimulating discussion and activities.

Program subject to change. For the most recent information about Tsinghua Week events, visit: ieas.berkeley.edu/tsinghua
Monday, April 5
West Pauley Ballroom, Martin Luther King Jr. Student Union

1:30–3 p.m. Opening Ceremonies

1:30 p.m. Welcoming Remarks: Chancellor Robert J. Birgeneau (UC Berkeley)
1:45 p.m. Opening Remarks: President Binglin Gu (Tsinghua)
2 p.m. Lan Xue, Professor and Dean, School of Public Policy and Management (Tsinghua), “Domestic Reform and Global Integration: The Evolution of China’s Innovation System in the Last 30 Years”
2:30 p.m Jasper Rine, Professor of Genetics, Genomics, and Development and Howard Hughes Medical Institute Professor (UC Berkeley), “Looking for the Good News in the Human Genome”

3:20–5:50 p.m. Academic Panel: Physics

Title: An East-West View of Physics at the Frontiers

Hosted by: Department of Physics

Location: West Pauley Ballroom, Martin Luther King Jr. Student Union

Co-chairs: Frances Hellman (UC Berkeley) and Banfeng Zhu (Tsinghua)

Panelists:

• Chancellor Robert J. Birgeneau, Professor of Physics (UC Berkeley), “High Temperature Superconductors: A Surprising Development”
• Shoushan Fan, Professor of Physics (Tsinghua), “Carbon Nanotube: from Materials to Applications”
• Tipei Li, Professor of Physics (Tsinghua), “A Cold and Rigid Universe after the Hot Big Bang”
• Marjorie Shapiro, Professor of Physics (UC Berkeley), “Searching for New Physics with the Large Hadron Collider”
• George Smoot III, Professor of Physics and Nobel Laureate (UC Berkeley), “Mapping the Universe and its History”
• Charles H. Townes, Professor of Physics and Nobel Laureate (UC Berkeley), “Measurements of Sizes and Shapes of Old Stars and Surrounding Material”
• Qukun Xue, Professor of Physics (Tsinghua), “Molecular Beam Epitaxy Growth and Novel Properties of Topological Insulator Thin Films”
• Chen Ning Yang, Professor of Physics and Nobel Laureate (Tsinghua), “Some Recent Research in Cold Atoms”
Tuesday, April 6

9–noon  Concurrent Academic Panels

9–11 a.m.  Academic Panel: Architecture
Title: Thinking about Cities: Bridging the Pacific
Hosted by: Department of Architecture
Location: 901 Wurster Hall
Panelists:
• Renée Y. Chow, Associate Professor of Architecture and Urban Design; Eva Li Chair in Design Ethics (UC Berkeley)
• Harrison Fraker, Professor of Architecture and Urban Design (UC Berkeley)
• Jennifer Wolch, Dean, College of Environmental Design; Professor of City and Regional Planning (UC Berkeley)
• Wenyi Zhu, Dean and Professor, School of Architecture (Tsinghua)
• Rui Yang, Chair and Professor, Department of Landscape Architecture, School of Architecture (Tsinghua)
• Jian Liu, Assistant Dean and Associate Professor, School of Architecture (Tsinghua)

9–11 a.m.  Academic Panel: Center for Entrepreneurship & Technology
Title: Tsinghua-Berkeley Global Technology Entrepreneurship (GTE)
Description: The Tsinghua-Berkeley Global Technology Entrepreneurship program is a joint program established in fall 2009. Taught by faculty from both Tsinghua University and Berkeley Engineering and based at Tsinghua, the program combines curriculum from Tsinghua’s School of Economics and Management and Berkeley Engineering’s Center for Entrepreneurship & Technology to introduce Tsinghua graduate students, to technology, entrepreneurship, and innovation. This session will feature an overview of the program, student project start-ups, and an opportunity for discussions with faculty from both universities.
Hosted by: Banatao Institute @ CITRIS and College of Engineering
Location: Banatao Auditorium, Sutardja Dai Hall
Panelists:
• Ikhlaq Sidhu, Director, Center for Entrepreneurship & Technology; Professor, Industrial Engineering and Operations Research (UC Berkeley)
• Max Shen, Associate Professor, Industrial Engineering and Operations Research (UC Berkeley)
• Jian Gao, Professor and Chair, Department of Innovation and Entrepreneurship, School of Economics and Management (Tsinghua)
• Kebin He, Executive Associate Dean, Graduate School (Tsinghua)

9 a.m.–noon Academic Panel: Psychology
Hosted by: Department of Psychology
Location: 5101 Tolman Hall

9 a.m.  Welcome Address: Richard Ivry, Professor and Acting Chair, Department of Psychology (UC Berkeley)
9:30 a.m.  **Title:** Psychology in Global Contexts  
Kaiping Peng, Director, Berkeley Program on Advanced Psychological Studies in Tsinghua (UC Berkeley)

10 a.m.  **Title:** Psychology in China  
- Fumin Fan, Professor and Vice Chair, Department of Psychology (Tsinghua)  
- Hong Li, Professor, Department of Psychology (Tsinghua)

10:30 a.m. Intermission

10:45 a.m. Berkeley-Tsinghua Collaborative Research Report  
Graduate Students: Kyle Jennings, Saiwing Yeung, Xiaowei Lu, Matthew Feinberg, Jennifer Stellar, Zach Rosner

1–3 p.m.  **Concurrent Academic Panels**

1–3 p.m.  **Academic Panel: CITRIS and the College of Engineering**  
**Title:** The Carbon Roadmap: Energy Efficiency for Buildings and Green Electronics  
The Carbon Roadmap project is a multidisciplinary study to develop a trajectory for the energy system transformation from a high-carbon, low-efficiency system to a low-carbon, high-efficiency system, and will serve as a guide for industry and government policies. This two-hour overview/discussion session will focus on resources and potential collaboration and be divided as follows: energy efficiency for buildings (1–2 p.m.) and green electronics (2–3 p.m.).

**Hosted by:** Banatao Institute @ CITRIS and the College of Engineering; Co-sponsored by the English Department  
**Location:** Banatao Auditorium, Sutardja Dai Hall

**Panelists:**  
- Costas Spanos, Professor and Associate Chair, Department of Electrical Engineering and Computer Sciences (UC Berkeley)  
- Eli Yablonovitch, Professor, Department of Electrical Engineering and Computer Sciences; Director, Center for Energy Efficient Electronics (UC Berkeley)  
- John Zysman, Professor, Political Science; Co-director, Berkeley Roundtable on the International Economy (UC Berkeley)  
- Xiaohong Guan, Professor, Department of Automation (Tsinghua)  
- Zhisheng Niu, Associate Dean and Professor, School of Information Science and Technology (Tsinghua)  
- Xiqin Wang, Chair and Professor, Department of Electronic Engineering (Tsinghua)
**Academic Panel: Public Policy**
*Title:* Comparative Public Policy
*Hosted by:* Goldman School of Public Policy
*Location:* Goldman School of Public Policy Living Room
*Panelists:*
- Henry E. Brady, Dean, Goldman School of Public Policy (UC Berkeley)
- Steven Raphael, Professor of Public Policy (UC Berkeley)
- Lan Xue, Dean and Professor, School of Public Policy and Management (Tsinghua)
- Qunhong Shen, Associate Professor, School of Public Policy and Management (Tsinghua)

3–5:15 p.m. Concurrent Panels

3–4 p.m. **Academic Panel: Institute of East Asian Studies (IEAS)**
*Title:* Religious Encounters in China: Buddhists, Christians, and Nestorians Under the Ming and Qing
*Description:* The trade routes of Western China have been the portal for ideas, customs, languages, and especially religions entering the country. Tsinghua History Professor Guogang Zhang explores the complex religious and cultural landscape in pre-modern China and the channels that facilitated introduction and transmutation of new philosophies.
*Hosted by:* Institute of East Asian Studies
*Co-sponsored by:* Center for Chinese Studies
*Location:* IEAS Conference Room, 2223 Fulton St., 6th floor
*Participants:*
- **Lecture by:** Guogang Zhang, Professor and Chair, Department of History (Tsinghua)
- **Discussants:** Nicholas Tackett, Assistant Professor, Department of History (UC Berkeley), Orna Tsultem, Ph.D., History of Art (UC Berkeley)
- **Moderator:** Wen-hsin Yeh, Director, Institute of East Asian Studies; Haas Chair Professor in East Asian Studies; Morrison Chair Professor in History (UC Berkeley)

4:15–5:15 p.m. **Academic Panel: Institute of East Asian Studies (IEAS)**
*Title:* History and Fiction as Narrative in the Contemporary Historical Novel
*Location:* IEAS Conference Room, 2223 Fulton St., 6th floor
*Lecture:* Li Cao, Professor of English Language and Literature, School of Humanities and Social Sciences; Deputy Director, Liberal Education (Tsinghua)
*Respondent:* Steven Lee, Assistant Professor, English Department (UC Berkeley)
*Chair:* Samuel Otter, Professor and Chair, English Department (UC Berkeley)
3:15–5:15 p.m.  **Academic Panel: Partners for Advanced Transit and Highways (PATH)**  
**Hosted by:** PATH  
**Location:** Sutardja Dai Hall, Room 250  
**Title:** Advanced Vehicle Control and Driver Assist Technologies  
**Description:** California PATH has been at the forefront of the research on Intelligent Transportation Systems (ITS). Tsinghua University is also leading research on ITS in various areas in China. In conjunction with UC Berkeley’s Tsinghua Week events, PATH researchers and Tsinghua delegates will conduct a two-day ITS workshop on April 6 (on campus) and April 7 (at the Richmond Field Station). Discussion areas will include: advanced vehicle control, driver assist, transportation safety, transportation planning, data and analysis, and Intellidrive/Vehicle Infrastructure Integration. Potential collaborative opportunities will be explored. The workshop is free and open to the public. RSVP is required for the April 7 event via email to Elaine Banks: elaine@path.berkeley.edu.  
**Moderator:** Wei-Bin Zhang, Keqiang Li  
- Keqiang Li, Department of Automotive Engineering (Tsinghua), “Overview of Tsinghua Work Related to Advanced Vehicle Control and Driver Assist Technologies”  
- Jianqiang Wang, Department of Automotive Engineering (Tsinghua), “Chinese Driver Behavior Analysis and Modeling”  
- Masayoshi Tomizuka, Department of Mechanical Engineering (UC Berkeley), “Adaptive Cruise Control Using Virtual Lead Vehicles”  
- Steven Shladover, California PATH Program (UC Berkeley), “Cooperative Adaptive Cruise Control-Human Factors Experiments”  
- Li Li, Department of Automation (Tsinghua), “Car Following Models Considering Headway Feature”  
- Hanshue Tan, California PATH Program (UC Berkeley), “Dynamic Modeling of Driving Skills — from Vehicle Control Perspectives”

5:30–7:30 p.m.  **Academic Panel: Institute of East Asian Studies (IEAS)**  
**Title:** Marxism and Confucianism Today: Comparative Philosophies in the Eurasian Realm  
**Description:** At this historical moment, with China undergoing dynamic change and internal challenges, its philosophical underpinnings are revisited. Speakers from Tsinghua discuss Marxism and Confucianism as understood in China, historically and within the contemporary context. Marxism — shared as a central organizing philosophy by much of Eurasia until the late 20th century — is discussed by Berkeley respondents in a wide-ranging conversation on comparative theory and practice. Co-sponsored by the Institute of East Asian Studies, Institute of Slavic, East European, and Eurasian Studies, and the Institute of European Studies.  
**Hosted by:** Institute of East Asian Studies  
**Location:** IEAS Conference Room, 2223 Fulton St., 6th Floor
Participants:
Lectures by:
• Zhengxiang Wei, Professor, School of Marxism (Tsinghua)
• Daniel Bell, Professor, Department of Philosophy (Tsinghua)
Respondents:
• Martin E. Jay, Sidney Hellman Ehrman Professor of History (UC Berkeley)
• John Connelly, Associate Professor, Department of History (UC Berkeley)
• Wen-hsin Yeh, Director, Institute of East Asian Studies; Haas Chair Professor in East Asian Studies; Morrison Chair Professor in History (UC Berkeley)
• Jason Wittenberg, Assistant Professor, Department of Political Science (UC Berkeley)
• D. Paul Thomas, Professor, Department of Political Science (UC Berkeley)
Moderator: Carla Hesse, Professor, Department of History; Dean, Social Sciences Division, College of Letters and Science (UC Berkeley)
**Wednesday, April 7**

9 a.m.–4 p.m.  **Partners for Advanced Transit and Highways (PATH) Conference**  
(see schedule below)

1:45–3:45 p.m.  **Academic Panel: Higher Education**

**Title:** Issues and Trends in Undergraduate Higher Education: China and the United States  
**Hosted by:** Center for Studies in Higher Education  
**Location:** Banatao Auditorium, Sutardja Dai Hall  
**Panelists:**
- Judson King, Director, Center for Studies in Higher Education; Provost and Senior Vice-Provost Emeritus (UC Berkeley)
- John Douglass, Senior Research Fellow, Center for Studies in Higher Education (UC Berkeley)
- Si Yuan, Vice President and Provost (Tsinghua)
- Li Cao, Professor of English Language and Literature, School of Humanities and Social Sciences; Deputy Director of Liberal Education (Tsinghua)

**Moderator:** Wen-hsin Yeh, Director, Institute of East Asian Studies; Haas Chair Professor in East Asian Studies; Morrison Chair Professor in History (UC Berkeley)

4 p.m.  **Closing Ceremonies**  
**Location:** Banatao Auditorium, Sutardja Dai Hall

Executive Vice Chancellor and Provost George Breslauer

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9 a.m.– 4 p.m   **Partners for Advanced Transit and Highways (PATH) Conference**  
**Location:** Richmond Field Station, Building 454, Conference Room

9 a.m.  **Overview**

**Introduction:** Masayoshi Tomizuka, Executive Associate Dean, College of Engineering (UC Berkeley)
- PATH Overview: Alex Skabardonis, Director, California PATH (UC Berkeley)
- Overview of PATH Research on Vehicle Infrastructure Integration: James Misener and Wei-Bin Zhang, California PATH (UC Berkeley)
- Transportation Research at Tsinghua Overview: Huapu Lu, Department of Civil Engineering (Tsinghua); Keqiang Li, Department of Automobile Engineering (Tsinghua); Yi Zhang, Department of Automation (Tsinghua)
- Overview of Institute of Transportation Studies: Samar Madanat, Director, Institute of Transportation Studies (UC Berkeley)

10 a.m.  **Traffic Safety and Driver Assistance**

**Moderator:** Ching-Yao Chan, Zuo Zhang (UC Berkeley)
- The Hierarchy Control System of Intelligent Hybrid Electric Vehicles: Yugong Luo, Department of Automobile Engineering (Tsinghua)
- Engine Control for Environmentally Friendly Driving: Karl Hedrick, Department of Mechanical Engineering (UC Berkeley)
Evaluation for Traffic Situation and Emergent Traffic Pathway Organization in Response to Severe Urban Emergencies: Zuo Zhang, Department of Automation (Tsinghua)

PATH Safety Research Program: Ching-Yao Chan, California PATH (UC Berkeley)

Discussion on Future Research and Potential Collaboration
Panelists: Keqiang Li, Yugong Lu, Jianqiang Wang, Zhiheng Li, Masayashi Tomizuka, Steve Shladover, Hanshue Tan, Xiaoyun Lu, Fanping Bu, Jill Huang

11:30 a.m. Visit PATH facility and demonstration
• SafeTrip (Jim Misener, Liping Zhang)
• VAA (Hanshue Tan, Jill Huang, and Fanping Bu)
• Truck and Shop Tour (Xiaoyun Lu)
• CICAS and Intelligent Intersection (Steve Shladover)
• Traffic Lab (Liping Zhang and Kun Zhou)

12:30 p.m. Lunch

1 p.m. Transportation, Planning, and Data Analysis
Moderators: Huapu Lu, Alex Skabardonis
• Tools for Operational Planning (TOPL): Roberto Horowitz, Department of Mechanical Engineering (UC Berkeley)
• Mobile Millennium — Cell phone Probes for Traffic Detection: Alex Bayen, Department of Civil Engineering and Environmental Engineering, (UC Berkeley)
• Dynamic Traffic Flow Forecasting and Traffic Information Service System Development and Application for Beijing: Huapu Lu, Professor, Department of Civil Engineering (Tsinghua)
• The Strategic Highway Research Program of Western China: Runhua Guo, Department of Civil Engineering (Tsinghua)

Discussion on Future Research and Potential Collaboration
Panelists: Runhua Guo, Zuo Zhang, Li Li, Alex Bayen, Alex Skarbadonis, Jingquan Li, Irene Li

2:30 p.m. Traffic Data Fusion and Vehicle Infrastructure Integration
Moderators: James Misener, Lin Zhang
• IntelliDrive – Vehicle Infrastructure Integration for Transportation Innovations: James Misener, California PATH (UC Berkeley)
• Traffic Signal Adaptation for Intersection Safety: Liping Zhang, California PATH (UC Berkeley)
• Networked Traffic Flow Feature Extraction Method and Application: Jianming Hu, Department of Automation (Tsinghua)
• Optimizing Content Dissemination in Heterogeneous Vehicular Networks: Lin Zhuang, Department of Electronics Engineering (Tsinghua)

Discussion on Future Research and Potential Collaboration
Panelists: Jianming Hu, Lin Zhang, Danya Yao, Yi Zhang, Alex Bayen, Liping Zhang, Kun Zhou, Susan Dickey

4 p.m. Adjourn