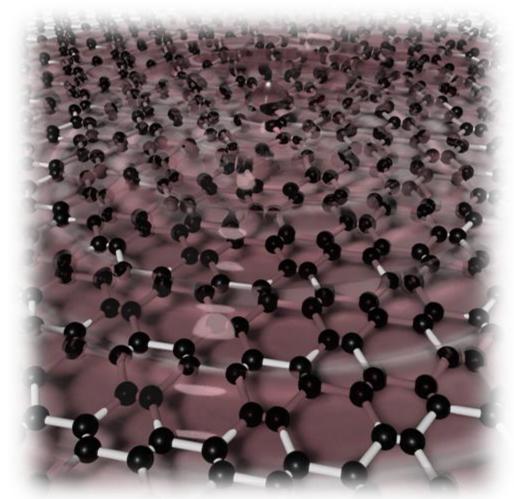






Two-Dimensional Materials and van der Waals Heterostructures



Max Planck – UBC – U Tokyo – CIFAR

Quantum Materials Summer School April 8-10, 2019

WELCOME

We warmly welcome you to the Quantum Materials Summer School, held jointly between the Max Planck-UBC-U Tokyo Centre for Quantum Materials and CIFAR Quantum Materials Program, in Vancouver, BC. We hope this summer school offers opportunities for learning, collaboration, and a chance to present your work.

We especially thank our speakers and funding partners for making this possible.

Sincerely,

The Organizing Committee

AT A GLANCE

Accommodations

The summer school accommodations are generously provided by CIFAR at the Pan Pacific Hotel, 300 - 999 Canada Place, Vancouver, BC V6C 3B5. Shuttles are provided between the hotel and the school, which will be hosted at the Sage building on the University of British Columbia Campus, 6331 Crescent Rd, Vancouver, BC V6T 1Z1.

Important dates

April 7th: Arrivals (Hotel check-in begins at 4 pm)

April 8th: Lab Tours at the Stewart Blusson Quantum Matter Institute and reception dinner at the Gallery.

April 9th: Poster Session

April 10th: Outings to Granville Island/Stanley Park/Gas Town and Pub Crawl in downtown Vancouver.

SCHEDULE

MONDAY APRIL 8TH

Breakfast	7:30
Shuttle	8:30
Registration	9:30
Lecture 1a: Elaine Li	10:00
Coffee Break	11:00
Lecture 1b: Elaine Li	11:30
Lunch and Free time	12:30
Lecture 2a: Pablo Jarillo-Herrero	14:00
Coffee Break	15:00
Lecture 2b: Pablo Jarillo-Herrero	15:30
Student Talks	16:30
Lab Tours @ SBQMI	17:00
Dinner @ The Gallery	18:00
Shuttle	20:00

TUESDAY APRIL 9TH

7:30	Breakfast
8:30	Shuttle
9:30	Lecture 3a: Yoshihiro Iwasa
10:30	Coffee Break
11:00	Lecture 3b: Yoshihiro Iwasa
12:00	Lunch and Free time
1:30	Student Talks
14:00	Lecture 4a: Oskar Vafek
15:00	Coffee Break
15:30	Lecture 4b: Oskar Vafek
16:30	Poster Session
18:30	Shuttle

WEDNESDAY APRIL 10TH

7:30	Breakfast
8:30	Shuttle
9:30	Lecture 5a: Eli Rotenberg
10:30	Coffee Break
11:00	Lecture 3b: Eli Rotenberg
12:00	Lunch and Free time
1:30	Student Talks
14:00	Lecture 6a: Adina Luican-Mayer
15:00	Coffee Break
15:30	Lecture 6b: Adina Luican-Mayer
16:30	Shuttle
17:30	Group Outings
20:00	Pub Crawl

SPEAKERS

ELAINE LI

UNIVERSITY OF TEXAS

Studies of light-matter interaction in quantum-confined systems have provided great insight into diverse and fundamental problems such as many-body interactions and quantum entanglement. We use and develop a variety of optical spectroscopy tools such as correlated single photon counting, Brillouin light scattering, and multidimensional ultrafast spectroscopy to probe electron dynamics in nanostructures.

ELI ROTENBERG

LAWRENCE BERKELEY NATIONAL LABORATORY Director of LBNL's Microscopic and Electronic Structure Observatory (MAESTRO), a dedicated ARPES beamline, Dr. Rotenberg's research interests are the relationship between electronic structure and morphology, symmetry, and dimensionality, and the role of many-body interactions on the ground states of low dimensional materials such as graphene, metal and oxide surfaces.

PABLO JARILLO-HERRERO

(MIT)

The Jarillo-Herroro group is currently focused on quantum transport and quantum optoelectronic measurements in low dimensional materials and their combined hybrids, with special emphasis on investigating their superconducting, magnetic, and topological properties.

ADINA LUICAN-MAYER

UNIVERSITY OF OTTAWA

Our laboratory integrates scanning probe microscopy and fabrication of custom materials and nanodevices. We aim to advance knowledge of physical phenomena that emerge as a result of low dimensionality, presence of surfaces and interfaces, and proximity between different states of matter.

YOSHIHIRO IWASA

UNIVERSITY OF TOKYO

Prof. Iwasa has been working on 2D superconductivity induced by ionic gating, and is currently interested in the symmetry control and related physical properties of 2D and related materials, which includes electronic phase transitions, valleytronics, nonlinear transport properties, and optoelectronic properties.

OSKAR VAFEK

LABORATORY

N ATIONAL HIGH M AGNETIC FIELD

My research interests lie in the area of quantum condensed matter physics, primarily superconductivity and strongly correlated systems.

LOCAL INFORMATION

Vancouver is a bustling city on the west coast of Canada, and is known for its ethnic diversity. It is surrounded by mountains, and features a number of beautiful beaches. During your free time, there are lots of places to visit!

On Campus

Mahoney's: Easygoing spot offering imported & local brews, Irish pub fare with a fusion spin & live music. Trivia Night (Tuesdays starting at 8pm)

Wreck Beach (clothing optional!)

Koerner's Pub: Hip, minimalist tavern serving craft beers & sustainable pub grub with global flavors.

Downtown Vancouver

Stanley Park: Stanley Park is a 405-hectare public park that borders the downtown of Vancouver in British Columbia, Canada and is almost entirely surrounded by waters of Vancouver Harbour and English Bay.

Granville Island: Granville Island is a peninsula and shopping district in Vancouver, British Columbia, Canada. It is located across False Creek from Downtown Vancouver under the south end of the Granville Street Bridge. It features a farmer's market and locally made goods.

Gastown: Lively Gastown is known for its whistling Steam Clock and mix of souvenir shops, indie art galleries and decor stores in Victorian buildings. A trendy food and drink scene includes chic cocktail lounges and restaurants serving everything from gourmet sandwiches to local seafood.

thank you!

the organizing committee

Marie-Eve Boulanger Stepan Fomichev MengXing Na

Andrea Damascelli / Joshua Folk / Ziliang Ye