June 25 (Sunday)

14:00 - 18:30	Welcome Reception Registration
18:30 - 20:00	Dinner (Churchill Dining Hall)

June 26 (Monday)

8:15 - 8:45	Coffee/Tea with Pastries			
8:45 - 9:00	Opening Remarks (Wolfson Hall): **Manish Chhowalla**			
9:00 - 9:50	Plenary talk (Wolfson Hall) - **Richard Friend**			
	Wolfson Hall	Jock Colville Hall	Club Room	Seminar Room 2
10:00 - 10:30	**Mark Hersam** Neuromorphic Computing with 2D Transition Metal Dichalcogenides	**Hua Zhang** Phase engineering of nanomaterials	**David Cobden** Correlated and topogical states in moire semiconductor heterostructures	**Lance Li** Epitaxial substitution of metal iodides: A low-temperature growth method of 2D metal chalcogenides
10:30 - 11:00	**Joerg Appenzeller** State-of-the-art transition metal dichalcogenide devices	**Judy Cha** Intercalated 2D Materials and Heterostructures	**Priya Mahadevan** Why do twisted bilayers behave differently from their untwisted counterparts?	**Kibum Kang** Bridging 2D and 3D Materials: Exploring Innovative Growth Strategies through the van der Waals Interface
11:00- 11:30	Coffee break			
11:30 - 12:00	**Xiangfeng Duan** (TBA)	**Paolo Samori** Molecules enabling multi-responsive and high-performance 2D TMDs electronics	**Kwabena Bediako** Magnetic and charge order in transition metal dichalcogenide heterostructures	**Cheol-Joo Kim** Grain boundary engineering in two-dimensional crystals
12:00-12:30	**Albert Davydov** Tunable doping of InSe bulk single crystals for 2D electronics	**Chun-Wei Chen** Manipulating atomic layer/liquid electrolyte interfaces for energy conversions	**Ritesh Agarwal** Three-Dimensional Twistronic Photogalvanic Effect - A New Paradigm of Light-Matter Interaction	**Radha Boya** Angstrom-scale channels made from 2D materials: Molecular Transport
12:30 - 13:30	Lunch (Churchill Dining Hall)			
13:30 - 14:20	Plenary talk (Wolfson Hall) - **Philip Kim** Manipulation of Charges and Excitons in Atomically Thin TMD Heterostructures			
	Wolfson Hall	Jock Colville Hall	Club Room	Seminar Room 2
14:30 - 15:00	**Benjamin Groven** In search of industry-compatible deposition chemistries for highly crystalline MX_2 materials	**Cristina Gomez-Navarro** Mechanics of defective 2D MoS_2	**Yue Wang** Van der Waals materials for nanophotonics and laser devices	**Alberto Morpurgo** Recent developments in ionic gated devices based on 2D semiconductors
15:00 - 15:30	**Deji Akinwande** Graphene Electronic Tattoos for Continuous Blood Pressure, MetaHealth, and Biosensors	**Yimo Han** Strain and Defects in Two-Dimensional Materials	**Diana Y. Qiu** Exploring Many-body Effects on Optical Excitations and their Dynamics in Low-Dimensional Materials	**Chelsey Dorow** 2D Materials for the Future of Moore's Law Scaling
15:30 - 16:00	Coffee break			
16:00 - 16:30	**Jeehwan Kim** (TBA)	**Junhao Lin** Atomic study of defects and its correlations to the material properties in novel 2D materials	**Vinod Menon** Strong exciton-photon interaction in 2D transition metal dichalcogenides	**John Robertson** Getting Low Ohmic Resistances for Moire Interfaces of Metals and MoS_2 or WSe_2 Contacts

16:30 - 17:00	**Deep Jariwala** Low-Power Logic and Memory Devices with 2D Semiconductors	**Elisa Miller-Link** Defect Engineering in Large Area Epitaxial Monolayer MoS_2 for Optoelectronics and Beyond	**Sunmin Ryu** Interferometric Second-Harmonic Generation Spectroscopy of Two-Dimensional Heterocrystals	**Chul-Ho Lee** Interface Band Engineering Toward High-Performance 2D van der Waals Electronics
17:00 - 17:30	**Andrea Ferrari** (TBA)	**Hannah Stern** Coherent Control of a Single Electron Spin in a 2D Material at Room Temperature	**Hyeonsik Cheong** Optical spectroscopy of twisted TMD heterostructures	**Mandar Deshmukh** Quantum noise limited amplifier using graphene Josephson junctions
17:30 -19:30	Barbecue (food starts at 18:00)			
19:30 - 21:00	**Poster Session**			

June 27 (Tuesday)

8:30 - 9:00	Coffee/Tea with Pastries			
9:00 - 9:50	Plenary talk (Wolfson Hall) - **Iuliana Radu**			
	Wolfson Hall	Jock Colville Hall	Club Room	Seminar Room 2
10:00 - 10:30	**Jiwoong Park** Building 2D solids for 2D transport	**Young Hee Lee** Harvesting solar energy beyond SQ limit	**Jonathan Coleman** Removing the bottlenecks to charge transport in printed nanosheet networks	**Moshe Ben Shalom** Ladder Ferroelectricity by vdW Sliding
10:30 - 11:00	**Yasumitsu Miyata** 1D nanostructures based on transition metal chalcogenides	**Weida Hu** Infrared photodetectors based 2D materials and Van der Waals heterostructures	**Cecilia Mattevi** Synthetic tuneability of the 1T' -1T phases of TMDs and their applications	**Shu Ping Lau** Ferroelectricity in Two-Dimensional Heterobilayers
11:00 - 11:30	Coffee break			
11:30 - 12:00	**Joshua Robinson** Developing and Integrating Atomically Thin Metals, Semiconductors, and Insulators	**Young Duck Kim** Electrically driven deep ultraviolet light emission from hexagonal boron nitride van der Waals heterostructures	**Marija Drndic** (TBA)	**Paula Giraldo-Gallo** Room temperature multiferroicity in a 2D van der Waals material
12:00-12:30	**Zakaria Al Balushi** Spatially Controlled Growth of 2D Materials	**Yu-Jung Lu** Scalable 2D Material-Based Plasmonic Devices	**Jieun Yang** Tuning the Oxidation State of Iron on 1T-MoS2 Nanosheets for Efficient Ammonia Production via Electrochemical Reduction of Nitrate	**Pablo Ares** Polarizations in hexagonal boron nitride: Piezoelectricity and Ferroelectricity
12:30 - 13:30	Lunch (Churchill Dining Hall)			
13:30 - 14:20	Plenary talk (Wolfson Hall) - **Arindam Ghosh** Engineering and probing new phases in twisted van der Waals heterostructures containing transition metal dichalcogenides layers			
	Wolfson Hall	Jock Colville Hall	Club Room	Seminar Room 2
14:30 - 15:00	**Sarah Haigh** Probing Surfaces and Interfaces in Transition Metal Dichalcogenides by Advanced Transmission Electron Microscopy	**Seongil Im** 2D/2D and 2D/3D Heterostack FETs for Multifunctional Electronics	**Jyoti Katoch** Momentum-resolved view of electronic structure in van der Waals heterostructures	**Peng Zhou** Two-dimensional devices and integration towards the silicon lines

15:00 - 15:30	**Ute Kaiser** Properties of functionalized two-dimensional TMD and TMPT heterostructures from low-voltage TEM experiments	**Susan Fullerton Shirey** Strain-induced 2H to 1T' Phase Transition in Suspended $MoTe_2$ using Electric Double Layer Gating	**Wang Yao** Layertronics of valley electrons in moiré superlattices of 2D semiconductors	**Norbert Koch** Energy level alignment and fundamental processes at interfaces between monolayer transition metal dichalcogenides and organic semiconductors
15:30 - 16:00	Coffee break			
16:00 - 16:30	**Jing Kong** (TBA)	**Valeria Nicolosi** Processing and applications of 2D MXene inks	**Saroj Prasad Dash** Nanoelectronics and Spintronics with 2D Materials Heterostructures	**Silvija Gradecak** Scalable Back-End-of-Line Compatible Growth of TMDs via Atomic Layer Deposition
16:30 - 17:00	**Xinran Wang** 2D semiconductors for future computing	**Stephan Hofmann** Operando and High-throughput Approaches to Process Discovery for Monolayer Crystals	**Hyunsoo Yang** Topological transition metal dichalcogenides for spin-orbit torque devices	**Moon-Ho Jo** Epitaxial texturing of atomically thin van der Waals lattice
17:00 - 17:30	**Elisa Riedo** (TBA)	**Antonija Grubisic-Cabo** Kinetic In-situ Synthesis (KISS) technique of large-area 2D materials exfoliation	**Yuanbo Zhang** The Expanding Flatlands - 2D Topological Materials and Beyond	**Shengxi Huang** Designer 2D materials for new sensing paradigms
19:15 - 20:30	Dinner (Churchill Dining Hall)			
20:30 - 21:15	Post prandial plenary talk (DH) – **Jeehwan Kim**			

June 28 (Wednesday)

8:00 - 8:30	Coffee/Tea with Pastries			
8:30 - 9:30	**Women in Science panel and discussion**			
9:30 - 10:20	Plenary talk (Wolfson Hall) - **Tony Heinz**			
	Wolfson Hall	Jock Colville Hall	Club Room	Seminar Room 2
10:30 - 11:00	**James Hone** Synthesis, characterization, and quantum properties of ultrapure transition metal dichalcogenide crystals	**Soo Min Kim** How to synthesize high quality 2D materials on wafer scale?	**Chun Ning Jeanie Lau** Giant Tunability of Intersubband Transitions and Quantum Hall Quartets in Ultrathin InSe	**Hyeon Suk Shin** Current Status and Challenges of hBN Growth by Chemical Vapor Deposition
11: 00 -11:30	Coffee break			
11:30 - 12:00	**Eric Pop** What Are 2D Materials Good For?	**Leslie Schoop** Chemical Exfoliation of Quantum Materials	**Tomoki Machida** Symmetry engineering and subband electronics using van der Waals assmbly of transition metal dichalcogenides	**Hiroki Ago** Controlled CVD growth of multilayer hBN for 2.5D applications
12:00 - 12:30	**Junyoung Kwon** Industrial Development and Challenges of 2D Electronics for Next Generation CMOS Logic Applications	**George Bepete** Reduction-based intercalation, exfoliation and functionalization of hexagonal boron nitride	**Christopher Petoukhoff** Charge and Energy Transfer Mechanisms in Type-II van der Waals Heterostructures	**Tom Kempa** Unconventional vdW Heterostructures from Bespoke 2D Atomic and Molecular Lattices

12:30 - 13:30	Lunch (Churchill Dining Hall)			
13:30 - 14:20	Plenary talk (Wolfson Hall) - Joan Redwing			
	Wolfson Hall	Jock Colville Hall	Club Room	Seminar Room 2
14:30 - 15:00	**Yoshihiro Iwasa** Symmetry engineering and bulk photovoltaic effect in TMD nanomaterials	**Xinliang Feng** (TBA)	**Vincent Tung** (TBA)	**Heejun Yang** Van der Waals Heterostructures for Orbital Gating in Photo-transistors and Electronic Spectroscopy
15:00 - 15:30	**Huiming Cheng** Inorganic Liquid Crystals Based On 2D Materials	**Shasha Guo** Freestanding amorphous platinum layer for ultra-high current density water splitting	**Ki Kang Kim** Growth of single-crystal van der Waals layered materials	**Jong-Hyun Ahn** MoS_2 TFT backplane for display
15:30 - 16:00	Coffee break			
16:00 - 16:30	**Ali Javey** 2D Semiconductor Optoelectronics: Advances, Challenges and Opportunities	**Alessandro Molle** Nanoscale Engineering of Two-Dimensional Xenes and Transition Metal Dichalcogenides	**Hyunseob Lim** Epitaxial Growth of 2D MoS_2 and WS_2 using inorganic molecular precursors, $MOCl_4$ and $WOCl_4$: The critical role of Substrate Surface Termination	**Wenjing Zhang** Graphene-enhanced van der Waals contacts between three-dimentional metals and two-dimentional semiconductors
16:30 - 17:00	**Peide Ye** Tunable Chirality-dependent Nonlinear Electrical and Optical Responses in 2D Tellurium	**Marianna Sledzinska** Controlling thermal transport in 2D materials	**Sefaattin Tongay** The synthesis and engineering of two-dimensional Janus quantum layers	**Yang Chai** Bioinspired vision sensors with 2D semiconductors
17:00 - 17:30	**Berend Jonk**er Quantum emitters in 2D materials	**Serkan Kasirga** Ion transport in ultra-thin single-crystalline transition metal chalcogenides and oxides	**Shixuan Du** Rational design of low dimensional quantum materials	**Sudha Mokkapati** (TBA)
17:30 - 18:00	Editorial session: **Alberto Moscatelli**			
18:00 -19:30	Break			
19:30 - 21:00	Gala dinner (drink reception start at 19:00)			

June 29 (Thursday)

8:15 - 9:00	Coffee/Tea with Pastries			
	Wolfson Hall	Jock Colville Hall	Club Room	Seminar Room 2
9:00 - 9:30	**Andras Kis** (TBA)	**Suyeon Cho** Engineering active sites of two-dimensional materials for active hydrogen evolution reaction	**Jeong-O Lee** Ultrathin metal film growth on graphene via van der Waals epitaxy and applications of metal-graphene hybrid	
9:30 - 10:00	**Goki Eda** Upconversion Electroluminescence in Van Der Waals Tunnel Diode	**Damien Voiry** Surface Engineering of MoS2 Nanosheets For Water Reclamation	**Tania Roy** MoS2-based devices for neuromorphic computing	
10:00 - 10:20	Coffee break			

10:20 - 10:50	**Saptarshi Das** 2D Materials-based Bio-inspired Devices	**Saurabh Lodha** Few-layer 2D TMD-based photo and strain detectors		
10:50-11:20	**Yan Wang** Van der Waals contacts for 2D materials	**Prasana Sahoo** Exotic 2D Lateral Heterostructures and Optoelectronic Devices		
11:20-11:50				
12:00 - 13:30	Lunch (Churchill Dining Hall)			
14:00-17:00	Lab tours and other activities for those interested			