



APS March Meeting 2019 – 2DCC Presentations

Note: The following 18 have either acknowledged the 2DCC in their abstract or will in their talk/poster

[Session B02: Dielectric & Ferroic Oxides -- Flexoelectric, Photovoltaic, and Piezoelectric properties](#)

11:15 AM–2:15 PM, Monday, March 4, 2019

BCEC Room: 107A

Abstract: B02.00006: Complex chalcogenides as highly-polarizable semiconductors*

1:03 PM–1:15 PM

Presenter: Rafael Jaramillo (MIT)

2DCC User – Bulk Growth Facility

[Session E03: Novel Transport in Topological Systems](#)

8:00 AM–11:00 AM, Tuesday, March 5, 2019

BCEC Room: 107B

Abstract: E03.00009: μ -ARPES studies of few-layer WTe₂

9:36 AM–9:48 AM

Presenter: Antonio Rossi (University of California, Davis)

2DCC User – Bulk Growth Facility

[Session E13: 2D Materials \(General\) -- Growth, Mostly CVD/T](#)

8:00 AM–10:48 AM, Tuesday, March 5, 2019

BCEC Room: 153B

Abstract: E13.00004: From Synthesis to Quantum Properties of Novel 2D Layers*

8:36 AM–9:12 AM

Presenter: Joshua Robinson (Materials Science and Engineering, Penn State University)

2DCC In-House Research – Thin Films Facility

[Session E40: Magnetic Excitations in Oxides](#)

8:00 AM–11:00 AM, Tuesday, March 5, 2019

BCEC Room: 208

Abstract: E40.00012: Terahertz emission spectroscopy of YIG | topological insulator bilayers

10:36 AM–10:48 AM

Presenter: Evan Jasper (Department of Physics, The Ohio State University)

2DCC User – Thin Films Facility

[Session F15: 2D Materials \(Semiconductors\) -- Optical Properties I](#)

11:15 AM–2:15 PM, Tuesday, March 5, 2019

BCEC Room: 154

Abstract: F15.00003: Exciton regulation of resonant Raman scattering in monolayer MoS₂

11:39 AM–11:51 AM

Presenter: Yuanxi Wang (Materials Research Institute, Penn State University)

2DCC In-house Research – Theory/Simulation Facility



Session G70: Poster Session I (2:00pm-5:00pm)

2:00 PM, Tuesday, March 5, 2019

BCEC Room: Exhibit Hall

Abstract: G70.00071: Schottky diode based on large area CVD-grown WSe₂

Presenter: Ahmad Matar Abed (Physics and Electronics, University of Puerto Rico at Humacao)

2DCC User – Thin Films Facility

Abstract: G70.00040: Optical Properties of MBE-grown (Bi_{1-x}Sb_x)₂Te₃ Thin Films

Presenter: Phoebe Killea (Kenyon College)

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Session R41: Spin Dynamics II

8:00 AM–11:00 AM, Thursday, March 7, 2019

BCEC Room: 209

Abstract: R41.00002: Ferromagnetic resonance and proximity effect in WTe₂/magnetic insulator heterostructure

8:12 AM–8:24 AM

Presenter: Peng Li (Department of Applied Physics, Stanford University)

2DCC User – Thin Films Facility

Session S02: Topological Materials -- Magnetic Materials

11:15 AM–2:15 PM, Thursday, March 7, 2019

BCEC Room: 107A

Abstract: S02.00003: Crossover of Quantum Anomalous Hall to Topological Hall Effects in Magnetic Topological Insulator Sandwich Heterostructures

11:39 AM–11:51 AM

Presenter: Jue Jiang (Physics, Penn State University)

2DCC In-house Research – Thin Films Facility

Abstract: S02.00006: Anomalous Hall Effect in Intrinsic Antiferromagnetic Topological Insulator MnBi₂Te₄

12:15 PM–12:27 PM

Presenter: Seng Huat Lee (Materials Research Institute, Penn State University)

2DCC In-house Research – Bulk Growth Facility

Abstract: S02.00009: Anisotropic magnetotransport and planar Hall effect in the quantum anomalous Hall regime

12:51 PM–1:03 PM

Presenter: Michelle Tomczyk (Physics, Penn State University)

2DCC In-house Research – Thin Films Facility



Abstract: S02.00010: Berry Phase Engineering in Magnetic Topological Insulator Heterostructures*

1:03 PM–1:15 PM

Presenter: Fei Wang (Physics, Penn State University)
2DCC In-house Research – Thin Films Facility

Abstract: S02.00012: Magneto-Transport Study of Magnetic/Nonmagnetic Topological Insulator Heterostructures*

1:27 PM–1:39 PM

Presenter: Di Xiao (Physics, Penn State University)
2DCC In-house Research – Thin Films Facility

Session T70: Poster Session III(1:00pm-4:00pm)

1:00 PM, Thursday, March 7, 2019

BCEC Room: Exhibit Hall

Abstract: T70.00239: Characterization of 2D Hybrid Systems: Graphene and Beyond

Presenter: Sajedeh Pourianejad (JSNN, UNC Greensboro)
2DCC User – Thin Films Facility

Abstract: T70.00236: Inversion-domain-free growth of epitaxial MoS₂ on hBN assisted by substrate defects: towards full orientation control

Presenter: Yuanxi Wang (Materials Research Institute, Pennsylvania State University)
2DCC In-House Research – Theory/Simulation Facility

Session V02: Topological Materials -- Mesoscopic and Novel Probes

2:30 PM–5:30 PM, Thursday, March 7, 2019

BCEC Room: 107A

Abstract: V02.00008: Topological Hall Effect in Dual-gated Magnetic Topological Insulator Heterostructures

3:54 PM–4:06 PM

Presenter: Run Xiao (Physics, Penn State University)
2DCC In-house Research – Thin Films Facility

Session V13: 2D Materials -- Optical Properties

2:30 PM–5:30 PM, Thursday, March 7, 2019

BCEC Room: 153B

Abstract: V13.00009: Electric field effect studies of atomically thin crystals of ferroelectric In₂Se₃

4:54 PM–5:06 PM

Presenter: Justin Rodriguez (Physics, Penn State University)
2DCC User – Bulk Growth Facility



Session X09: Topological Materials -- Thin Films

8:00 AM–10:48 AM, Friday, March 8, 2019

BCEC Room: 151A

Abstract: X09.00006: *In-situ* analysis of MBE-grown ZrTe₅ thin films

9:24 AM–9:36 AM

Presenter: Timothy Pillsbury (Physics and Materials Research Institute, Pennsylvania State University)

2DCC In-house Research – Thin Films Facility