

Flatlands and Beyond (2019) – A meet on 2D materials

Venue: Silver Jubilee Hall

Thursday, September 05, 2019

8:45 am – 09:30 am

Registration

09:30 am-11:00 am

Session 1

Chair

S.K. Ray, S.N. Bose centre

09:30 am- 10:00 am

Arindam Ghosh, IISc
[Spin effects at the boundary of graphene](#)

10:00 am- 10:30 am

Subhadeep Datta, IACS
[Magnetic flatlands](#)

10:30 am- 11:00 am

Prasenjit Sen, HRI
[Correct description of \$MPX_3\$ trichalcogenides in DFT : A case study](#)

11:00 am- 11:30 am

Tea Break

11:30 am-12:30 pm

Session 2

Chair

Milan Sanyal, S.N. Bose centre

11:30 am- 12:00 pm

D.D. Sarma, IISc
[Chemically exfoliated few layer \$MoS_2\$: What do we understand of its properties](#)

12:00 pm- 12:30 pm

Madhu Thalakulam, IISER TVM
[2D superconductivity and quantum metal phase in 1T- \$MoS_2\$](#)

12:30 pm- 02:00 pm

Lunch (at Basundhara hostel complex)

02:00 pm-03:30 pm

Session 3

Chair

Kamaraju Natarajan, IISER Kol

02:00 pm- 02:30 pm

K.V. Adarsh, IISER Bhopal
[Excitons in flatland](#)

02:30 pm- 03:00 pm

Sajal Dhara, IIT KGP
[Excitons in flatland](#)

03:00 pm- 03:30 pm

Biswanath Chakraborty, City University of New York
[Polariton devices in van der Waals materials](#)

03:30 pm- 04:00 pm

Tea Break

04:00 pm-05:30 pm

Session 4

Chair

Manoranjan Kumar, S.N. Bose centre

04:00 pm- 04:30 pm

Amit Aggarwal, IITK
Non-linear optical response in graphene

04:30 pm- 05:00 pm

Saikat Ghosh, IITK
Hybrid mechanical resonators with graphene

05:00 pm- 05:30 pm

Atindra Nath Pal, S.N.Bose centre
Non-local transport in InAs/GaSb composite quantum well

05:30 pm- 06:00 pm

Tea (at Basundhara hostel complex)

06:00 pm- 07:30 pm

Poster Session (at Basundhara hostel complex)

07:30 pm- 09:30 pm

Banquet
(at Basundhara hostel complex)

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Friday, September 06, 2019

09:30 am-11:00 am Session 1

Chair Prasenjit Sen. HRI

09:30 am- 10:00 am S.K. Ray, S.N.Bose centre
[Light matter interactions in plasmonic hybrid WS₂ layers](#)

10:00 am- 10:30 am Shaijumon, IISER TVM
[Edge-Rich 2D Nanomaterials: Controllable Synthesis and Electrocatalytic Applications](#)

10:30 am- 11:00 am T.N. Narayanan, TIFRH
[Two-Dimensional Heterostructures in Catalysis & Devices](#)

11:00 am- 11:30 am Tea Break

11:30 am-12:30 pm Session 2

Chair Anjan Barman, S.N Bose centre

11:30 am- 12:00 pm Sudipta Dubey, Emory University
[Optically active neutral and charged single photon emitters in atomically thin materials](#)

12:00 pm- 12:30 pm Sujit Manna, IITD
[Interfacial and topological superconductivity in 2D materials revealed by spin-resolved scanning tunneling spectroscopy](#)

12:30 pm- 02:00 pm Lunch (at Basundhara hostel complex)

02:00 pm-03:30 pm Session 3

Chair P.K Mukhopadhyay, S.N Bose Centre

02:00 pm- 02:30 pm Saurabh Lodha, IITB
[Photodetection using few-layer TMDs and their heterostructures](#)

02:30 pm- 03:00 pm Kausik Majumder, IISc
[Efficient non-radiative energy transfer across layered heterojunctions](#)

03:00 pm- 03:30 pm Achintya Singha, Bose Institute
[Optical Properties of Plasmon–Coupled 2D Materials](#)

03:30 pm- 04:00 pm Tea Break

04:00 pm-05:30 pm

Session 4

Chair

Prabhat Mandal, SINP

04:00 pm- 04:30 pm

T. Setti, S.N.Bose centre

Metal-chalcogen bond-length induced electronic phase transition from semiconductor to topological semimetal in ZrX_2 ($X = Se$ and Te)

04:30 pm- 05:00 pm

Satyajit Banerjee, IITK

Exploring the interplay between surface and bulk conductivity in Bi_2Se_3 and the role of disorder using a sensitive non contact technique

05:00 pm- 05:30 pm

Priya Mahadevan

Unexpected symmetries in twisted bilayer $MoSe_2$

05:30 pm- 05:45 pm

Vote of thanks