

**Density Functionals for
Many-Particle Systems:
Mathematical Theory and Physical Applications
of Effective Equations**

[23 - 27 Sep 2019]

Partially supported by Julian Schwinger Foundation
Session 4: Coordinators: John Dobson and Robert Seiringer

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Venue:

IMS Auditorium

Admission is free



3 Prince George's Park Singapore 118402
ims.nus.edu.sg

Density Functionals for Many-Particle Systems: Mathematical Theory and Physical Applications of Effective Equations

Session 4 (23 - 27 Sep 2019)

Coordinators: John Dobson and Robert Seiringer

Venue:

IMS Auditorium, 3 Prince George's Park Singapore 118402

Monday, 23 September 2019

Time	Title
0945 - 1000	Registration
1000 - 1045	Rafael Benguria: Towards a Rayleigh-Faber-Krahn inequality for the Dirac operator on a bounded domain in \mathbb{R}^2
1045 - 1100	Coffee Break
1100 - 1145	Fabio Pizzichillo: Boundary value problems for 2-D Dirac operator on corner domains
1145 - 1200	Coffee Break
1200 - 1330	John Dobson: Tutorial on Dispersion (vdW) Forces I
1330 - 1500	Lunch Break
1500 - 1545	Edgardo Stockmeyer: On the semiclassical spectrum of the Dirichlet-Pauli operator
1545 - 1600	Coffee Break
1600 - 1645	David Gontier: The reduced Hartree-Fock model with self-generated magnetic field
1645 - 1745	Discussion

Tuesday, 24 September 2019

Time	Title
0945 - 1000	Registration
1000 - 1045	Sébastien Lebègue: New two dimensional compounds: beyond graphene
1045 - 1100	Group Photo & Coffee Break
1100 - 1145	John Dobson: Dispersion interactions II: some aspects of low-dimensional systems
1145 - 1400	Lunch Break
1400 - 1445	Louis Garrigue: Hohenberg-Kohn theorems in quantum mechanics
1445 - 1500	Coffee Break

Tuesday, 24 September 2019

Time	Title
1500 - 1545	Lingling Cao: Mean-field model for the junction of two quasi 1D quantum Coulomb systems
1545 - 1600	Coffee Break
1600 - 1745	Discussion

Wednesday, 25 September 2019

Time	Title
0945 - 1000	Registration
1000 - 1045	Jeil Jung: Flatbands in twisted Dirac materials
1045 - 1100	Coffee Break
1100 - 1145	Robert Seiringer: The Local Density Approximation in Density Functional Theory
1145 - 1330	Lunch Reception at IMS
1330 - 1930	Social Event: Bukit Timah Nature Reserve

Thursday, 26 September 2019

Time	Title
0945 - 1000	Registration
1000 - 1045	Alberto Ambrosetti: Efficient many-body van der Waals interactions from local response functions, and the critical case of low dimensional nanosystems
1045 - 1100	Coffee Break
1100 - 1145	Torbjörn Björkman: van der Waals interaction in layered systems
1145 - 1200	Coffee Break
1200 - 1330	M. Lewin: Tutorial on Known and unknown facts about Jellium and its role in DFT
1330 - 1500	Lunch Break
1500 - 1545	Christian Hainzl: On the correlation energy of a high density Fermi gas
1545 - 1600	Coffee Break
1600 - 1645	Thanh Nam Phan: On the relation between the Gagliardo-Nirenberg and Lieb-Thirring inequalities
1645 - 1745	Discussion

Friday, 27 September 2019

Time	Title
0945 - 1000	Registration
1000 - 1045	Hongshuo Chen: The maximal negative ion of the time-depedent and time-indenpedent Thomas-Fermi-Weizsäcker theory
1045 - 1100	Coffee Break
1100 - 1145	Marcin Napiorkowski: Effective evolution for many-boson dynamics: focusing case in low dimensions
1145 - 1400	Lunch Break
1400 - 1700	Discussion



Scan QR Code for latest schedule.

