

Correlated Electrons Day 2019

Technion June 20

Organizers: A. Auerbach, E. Berg, Y. Dagan, Y. Meir, D. Orgad,
& E. Shimshoni

09:00 Bus leaves from Hof Hacarmel to Technion

09:30-10:00 Gathering and coffee. Room 500 Lidow Building

First Session: 10:00-12:30 (15 min talks) Chair: **Daniel Podolsky**

Udit Kahana (TAU) (Goldstein): Symmetry and correlation effects on band structure explain the anomalous transport properties of oxide interfaces.

Amit Keren (Technion) Is magnetism relevant to cuprate superconductivity ? lanthanides versus charge compensated 123

Jonathan Ruhman (BIU) Dynamical phase transition in systems undergoing repeated projective measurement

Danny Shahar (WIS) Hot Superconductors and Cold Insulators

Ehud Altman (Berkeley)) Theory of Entanglement transitions and natural error correction in quantum systems with measurements.

Chair: **Yigal Meir**

Dima Gutman (BIU) Thermal transport in one dimensional electronic fluid

Snir Gazit (HUJI) The orthogonal semi-metal: deconfined criticality and Fermi-surface reconstruction without translational symmetry breaking.

Yshai Manassen (BGU) Single spin magnetic resonance

Itai Silber (TAU) (Dagan) Insights from Specific heat and torque magnetometry about the ground state of 1T-TaS₂, a quantum spin liquid state?

Daniel Podolsky (Technion) Higgs amplification in non-equilibrium K3C60

12:30-14:00 Lunch and chats

Second Session: 14:00-16:30 (15 min talks) Chair: **Efrat Shimshoni**

Dan Arovas (UCSD) Magnetotransport in a model of a disordered strange metal

Erez Berg (WIS) Theory of a strange metal from hot fermions

Aviad Frydman, (BIU) "Experimental probing of quantum criticality at the superconductor insulator transition".

Yigal Meir (BGU) Observation of non-cyclic geometric phase jumps with a spatial matter-wave SU(2) interferometer

David Möckli (HUJI) (Khodas) s+if pairing in Ising superconductors induced by magnetic field

Chair: **Erez Berg**

Konstantin Yavilberg, (BGU) Differentiating Majorana from Andreev Bound States in a Superconducting Circuit

David Mross (WIS) Bridging partons and coupled-wire approaches to strongly entangled quantum matter

Tom Dvir (HUJI) (Steinberg) Andreev bound states in van der Waals heterostructures

Roni Majlin (TAU) Dagan) On 4Hb TaS₂

Assa Auerbach (Technion) Hall Anomalies in Strongly Correlated Metals

16:30 Coffee, chats and farewells