

Chair: Josef Weinbub

Note: Each talk slot contains 5 minutes of Q&A

Wigner Distribution Function

(Overview Talk)

David K. Ferry: “Wigner Functions, Variations and Entanglement”

09:00-09:30

(Short Talk)

Bartłomiej J. Spisak, Maciej Wołoszyn: “Wigner Representation of Electron Dynamics in Presence of Thermal Dephasing in Disordered Systems”

09:30-09:50

(Short Talk)

Kyoung-Youm Kim, Saehwa Kim: “Uncertainty and Quantum Correlation in Discrete Wigner Transport Equations”

09:50-10:10

Boundary Conditions

(Overview Talk)

Joon-Ho Lee, Mincheol Shin, Ting-wei Tang: “Review of Boundary Conditions and Discretization Schemes for the Solution of Wigner Transport Equation”

10:10-10:40

(Short Talk)

Anton Arnold, Ruo Li, Tiao Lu, Zhangpeng Sun: “Convergence of Stationary Wigner Equation with Inflow Boundary Conditions”

10:40-11:00

Break: 11:00-11:45

Simulations and Applications

(Overview Talk)

Wei Cai: “Adaptive Conservative Chebyshev Polynomial Spectral Element Methods for Transient Wigner Equation in Quantum Transport”

11:45-12:15

(Short Talk)

Josef Weinbub, Paul Ellinghaus, Mihail Nedjalkov, Siegfried Selberherr: “ViennaWD – Status and Outlook”

12:15-12:35

(Short Talk)

Paul Ellinghaus, Josef Weinbub, Mihail Nedjalkov, Siegfried Selberherr: “ViennaWD – Applications”

12:35-12:55