Workshop on Modeling and Simulation for Semiconductor Devices		
January 20, 2026 (S17-04-05)		
Time	Title	Name
Chair: Weizhu Bao		
9:00–10:00 AM	**Plenary Talk:** Memristor drift-diffusion systems for brain-inspired neuromorphic computing	Ansgar Jüngel
10:00–10:30 AM	**Tea Break**	
Chair: Shuigen Liu		
10:30–11:00 AM	Developing a power semi-conductor device simulation tool: challenge, experience and performance	Chijie Zhuang
11:00–11:30 AM	Energy stable and maximum bound principle preserving schemes for the Q-tensor flow of liquid crystals	Xiaoli Li
11:30–12:00 PM	The finite element method and numerical analysis for semiconductor device simulation	Wenhao Lu
12:00–2:00 PM	**Lunch Break**	
Chair: Chijie Zhuang		
2:00–2:30 PM	Simulation of open quantum systems with frozen Gaussian approximation	Zhenning Cai
2:30–3:00 PM	Electroluminescence and Light-Field Control in van der Waals Tunnel Junctions	Zhe Wang
3:00–3:30 PM	A discrete duality finite volume method with harmonic average for semiconductor drift–diffusion equations	Shuya Liu
3:30–4:00 PM	**Tea Break**	
Chair: Qingyuan Shi		
4:00–4:30 PM	Physical Insights into Vacancy-Based Memtransistors: Toward Power Efficiency, Reliable Operation, and Scalability	Maheswari Sivan
4:30–5:00 PM	Dopant-enhanced polarization readout in anisotropic 2D materials	Quanzhen Wan