

Table of contents

Tuesday 11 July 2023	1
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Workshop on Quantum Monte Carlo Methods at Work for Describing Novel States of Matter | (smr 3853)

Tuesday 11 July 2023

- Budinich Lecture Hall (LB) (09:30-17:40)

time	title	presenter
09:30	The Earth's inner core nucleation paradox	DARIO ALFE
10:15	Fostering accuracy in modelling materials and molecular complexes with quantum Monte Carlo	ANDREA ZEN
11:00	Coffee break	
11:30	Benchmarking the variational auxiliary field quantum Monte Carlo method	NATANAEL DE CARVALHO COSTA
12:15	Development of long-range phase coherence on the Kondo lattice	JIANJUN DONG
12:40	Lunch break	
14:30	The teaching from entanglement: 2D SU(2) antiferromagnet to valence bond solid deconfined quantum critical points are not conformal	YANG ZI MENG
15:15	The best of both worlds: how to combine real-space concepts from VMC with orbital-based quantum chemistry	SEYED ALI ALAVI-SHOVISHTARI
16:00	Coffee break	
16:30	Variational Monte Carlo in a multi-band Hubbard model for the iron pnictides: orbital selectivity and superconductivity	LUCA FAUSTO TOCCHIO
17:15	Directed-loop quantum Monte Carlo for retarded interactions: Competing orders from phonons & dissipation-induced order	MANUEL WEBER