

**'Quantum for ever' A symposium to honour H.
Rauchs 80th birthday and the EPS Historic Sites
Award**

Tuesday May, 21st 2019

09:15	Opening: T. Schumm, H. Abele	
09:45	D.M. Greenberger	'Gedanken' experiments and the Neutron Interferometer, and some thoughts on Proper Time in Quantum Mechanics."
10:15	A. Klein	Fresnel Diffraction and Neutron
10:45	W. Treimer	Watching Quantum Mechanics
11:15	U. Bonse	TBA
12:00	LUNCH individual	
14:00	A. Zeilinger	Tests of Bell's Theorem
14:30	P. Zoller	Verifying Quantum Machines
15:00	R. Blatt	Quantum Computation and Quantum simulation with trapped Ca ⁺ ions
15:30	M. Aspelmeyer	How does a quantum object gravitate?
16:00	Coffee Break	
16:30	K. Binder	Interfaces between coexisting Phases; what can we learn from Monte Carlo Simulations ?
17:00	H. Weinfurter	Könnt' man nicht....?
17:30	J. Schmiedmayer	Probing many body physics by matter wave interference

Wednesday, May 22nd 2019i

09:15	P. M. Schuster (EPS - Echophysics)	
09:45	EPS Historic Sites Ceremony EPS President P. Rudolf and Keynote Speaker A. Zeilinger	
12:00	Lunch Buffet	
13:00	Reactor Tours	
14:00	D. Dubbers	The neutron as a tool, and the neutron as an object
14:30	F. Mezei	Neutron wave functions and interference in the spin variable space
15:00	G. Badurek	Polarized Neutron Interferometry: A historical view
15:30	Y. Hasegawa	Neutron interferometer experiments at the Atominstiut; status quo
16:00	Coffee Break and Reactor Tours	
16:30	M. Arndt	Matter-wave interferometry with up to 14000 Neutrons in one particle
17:00	S. Filipp	Quantum chemistry calculations on a superconducting qubit quantum processor
17:30	Closing: H. Rauch	