# **FALLING** WALLS **FOUNDATION**

**WHICH ARE** THE NEXT **WALLS** TO FALL?

#### **8 NOVEMBER**

# **PROGRAMME**

WILHELM AND ELSE HERAEUS SYMPOSIUM FOR BREAKTHROUGHS IN PHYSICAL **SCIENCES** 

8 NOVEMBER	FALLING WALLS CIRCLE Radialsystem, Holzmarktstraße 33, 10243 Berlin
07.00 am – 5.00 pm	REGISTRATION & ON-SITE TESTING
8.45 – 9.00 am Studio A, 5. Fl.	WELCOME REMARKS
	Moderation: Johanna Stachel, Katharina Kohse-Höinghaus
9.00 – 9.30 am Studio A, 5. Fl.	TALK #1: THE SIGNIFICANCE OF A POLAR OPPOSITE FOR UNDERSTANDING EARTH'S CLIMATE
	Johann Philipp Klages
9.30 – 10.10 am Studio A, 5. Fl.	TALK #2: FROM NONLINEAR OPTICS TO HIGH-INTENSITY LASER PHYSICS
	Donna Strickland
10.10 – 10.40 am Studio A, 5. Fl.	TALK #3: UNDERSTANDING COVID-19 TRANSMISSION THROUGH AEROSOLS
	Yafang Cheng
10.40 – 11.00 am Studio A, 5. Fl.	COFFEE BREAK
11.00 – 11.30 am Studio A, 5. Fl.	TALK #4: INTEGRATED ION-TRAP QUANTUM PROCESSORS
	Christian Ospelkaus
11.30 – 12.00 am Studio A, 5. Fl.	TALK #5: PROGRESS IN QUANTUM COMPUTING
	Chao-Yang Lu
12.00 – 12.30 pm Studio A, 5. Fl.	TALK #6: ANALOG QUANTUM SIMULATION: FROM PHYSICS TO CHEMISTRY
	Juan Ignacio Cirac
12.30 – 1.00 pm Studio A, 5. Fl.	PANEL DISCUSSION: BREAKTHROUGH SCIENCE – CURIOSITY VS. SOCIETAL IMPACT
	Yafang Cheng, Skyler Degenkolb, Elham Fadaly, Johann Philipp Klages, Donna Strickland
1.00 – 2.00 pm	LUNCH BREAK
2.00 – 3.00 pm Lecture Hall	PLENARY TABLE: BIG SCIENCE FOR THE FUTURE – REKINDLING TRANSATLANTIC PARTNERSHIPS
	Eric Isaacs, Ottoline Leyser, Charlotte Warakaulle, Sibylle Günter
3.10 – 3.40 pm Studio A, 5. Fl.	TALK #7: PROVING THAT THE STERN-GERLACH SPLITTING IS A COHERENT QUANTUM PROCESS
	Ron Folman

### **CONTACT**

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3.40 – 4.10 pm Studio A, 5. Fl.	TALK #8: NOVEL OPERANDO METHODS FOR FOLLOWING BATTERY FUNCTION AND FAILURE
	Clare Grey
4.10 – 4.30 pm Studio A, 5. Fl.	COFFEE BREAK
4.30 – 5.00 pm Studio A, 5. Fl.	TALK #9: BREAKING WALLS TO THE UNKNOWN: THE 18 <sup>TH</sup> PARTICLE?
	Martin Fertl
5.00 – 5.30 pm Studio A, 5. Fl.	TALK #10: THE BREAKTHROUGH 2021: LIGHT EMISSION FROM HEXAGONAL SILICON GERMANIUM
	Erik Bakkers
5.30 – 6.00 pm Studio A, 5. Fl.	DISCUSSION & NETWORKING
	Johanna Stachel, Katharina Kohse-Höinghaus
6.00 pm	FALLING WALLS EVENING RECEPTION  Various options will be communicated in due time

Please bring your personalised badge, your electronic or printed version of your barcode ticket as well as your ID including a proof of vaccination or recovery to all Falling Walls events.