

FALLING WALLS FOUNDATION

Falling Walls announces Science Breakthrough of the Year 2023 laureates

- The awardees have achieved scientific breakthroughs in food security, quantum technologies, carbon capture, gender-based violence, music and cardiovascular science, and Open Access AI
- The award-winning projects were selected from more than 1000 applications
- On 9 November this year's laureates will present their groundbreaking research at the Falling Walls Science Summit in Berlin

Berlin, Germany, 13 September 2023: Which are the next walls to fall in science and society? Today the Falling Walls Foundation has announced the first six laureates of its Science Breakthrough of the Year award. The title is awarded annually and recognizes scientific breakthroughs in all academic disciplines.

*"These outstanding breakthroughs will change the face of the world and impressively prove what ingenuity, curiosity and courage can achieve" says **Andreas Kosmider**, Managing Director of the Falling Walls Foundation. "We thank the laureates for their perseverance in continuing to break down the walls to new discoveries that will benefit all of humankind."*

The last 2023 laureates in the Science Start-Ups, Science Engagement and Emerging Talents categories will be announced at the Science Summit after the pitch competition on 7 November. The prestigious science conference, hosted by the Falling Walls Foundation since 2009, takes place annually from 7 to 9 November in Berlin and brings together the world's leading researchers and decision-makers from business, academia, and government to highlight the potential of science in addressing the greatest challenges of our time. Discover more about the Science Summit programme and speakers at falling-walls.com/science-summit/

The Falling Walls Science Breakthrough of the Year 2023 recipients are:

LIFE SCIENCES

CHUAN HE – UNIVERSITY OF CHICAGO

Breaking the Wall to a New Green Revolution

Chuan He's laboratory work on the functional roles of RNA chemical modifications in gene expression regulation aims to build resilient high-yielding crops.

PHYSICAL SCIENCES

LIBOR ŠMEJKAL – JOHANNES GUTENBERG UNIVERSITY MAINZ

Breaking the Wall to Magnetic Quantum Matter

By analysing all possible mathematical symmetries of the spin in magnetic crystals Libor Smejkal identified altermagnets and opened new routes toward sustainable nanoelectronics.

ENGINEERING AND TECHNOLOGY

CAO THANG DINH – QUEEN'S UNIVERSITY

Breaking the Wall of Decarbonisation

Cao Thang Dinh developed a novel system that integrates carbon capture and conversion in a single step, addressing the biggest challenge in carbon dioxide conversion technology — low energy efficiency.

SOCIAL SCIENCES AND HUMANITIES

PUMLA DINEO GQOLA – NELSON MANDELA UNIVERSITY

Breaking the Wall of the Female Fear Factory

Explaining how gender and fear intersect in public spaces, Pumla Gqola's "Female Fear Factory" is a theatrical and public performance of patriarchal policing of and violence towards women and others cast/read as female.

ART AND SCIENCE

ELAINE CHEW – KING'S COLLEGE LONDON

Breaking the Wall of Musical Medicine

To see the effect of music on the heart, Elaine Chew creates models to characterise and visualise performed and composed music structures linking those to physiological signals from wearable sensors.

SCIENCE AND INNOVATION MANAGEMENT

ROBERT KACZMARCZYK , JENIA JITSEV AND CHRISTOPH SCHUHMANN - LAION E.V.

Breaking the Wall to Democratised AI

Christoph Schuhmann, Richard Vencu, Romain Beaumont, Robert Kaczmarczyk & Jenia Jitsev founded LAION to democratize AI research by providing open access to advanced AI models, tools, and datasets, fostering public engagement and awareness, and promoting international collaboration to create a transparent and inclusive AI ecosystem that benefits everyone.

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About the Falling Walls Foundation

The Falling Walls Foundation was inspired by the fall of the Berlin Wall on 9 November 1989 and the dawn of a new era of freedom. The nonprofit foundation promotes breakthrough thinking and is building a growing network of leaders in academia, business, and the public sector to tackle grand challenges and bring groundbreaking ideas to society. More: falling-walls.com/