QUANTUM SHORTS: 10 SHORTLISTED FINALISTS

10-57
Dir. Daniel Baig (United States)
4 min

A police officer responding to an emergency call unknowingly stumbles into the world of quantum physics in this tense, sci-fi mystery by Daniel Baig. A man has locked himself in a room and refuses to be seen. For the officer, it’s a life or death situation in more ways than he realizes. He may have got the right house address, but he’s in a very different location.

ATOMS SEARCHING FOR IMMATERIALITY
Dir. Anne-Marie Bouchard (Canada)
5 min

“There is only one moral worth in this story, one essential fact: we are nothing but ridiculous sparks in the light of the universe. May we have the wisdom not to forget it.” Hubert Reeves
Anne-Marie Bouchard’s film shines a spotlight on photo luminescent nanoparticles, known as quantum dots. When they are observed under the microscope, they give the impression of looking into space through a telescope. These bright spots may form the surface of your next screen or relay information in a new generation of optical fibers.

GLUON FREE
Dir. Chris Willoughby (Australia)
4 min

“You can’t just use the strangeness of quantum physics to justify any absurdity,” says a strange creature in Gluon Free. This animation was created by Chris Willoughby, a filmmaker in Australia, to explore the idea of parallel worlds. It features a meta appearance of a parallel Quantum Shorts festival. Chris returns to the festival having won the very first Quantum Shorts competition in 2012 with an animation called Quantum Daughter.
**HEADS OR TAILS**  
Dir. Lin Tianyun and Chen Peishan (Singapore)  
4 min

Witness a tense battle between a detective and a psychopath in Heads or Tails. Is the girl dead or alive? This film by Singaporean Director Lin Tianyun and screenwriter Chen Peishan explores the Schrödinger’s cat paradox through the cinematic lens of a criminal investigation. Health warning: the possibility of a cat existing in a quantum superposition of dead and alive states exists only as a thought experiment.

**IF THE WORLD SPINNED BACKWARDS**  
Dir. Leonardo Martinelli (Brazil)  
5 min  
Portuguese with English subtitles

In a dystopic world where all things happen in reverse, a man leaves a message to his beloved. This poetic short film by Leonardo Martinelli, a Brazilian filmmaker, explores how man occupies space and time. It parallels an exciting question in physics: quantum laws do not distinguish between time running forwards and backwards, so what is the origin of the ‘arrow of time’ we experience?

**KNOCK KNOCK**  
Dir. Noemi Gunea and Grace Lambert (United Kingdom)  
3 min

Two young women are cleaning the house when they hear a knock. They want to see who it is but are afraid to open the door lest it drive them into a black hole. An existential comedy by Noemi Gunea and Grace Lambert, this film is about fear of the unknown and fear of the complicated and humbling inner workings of the cosmos. The two women try to face these fears by a sort of musical spell, which proves just as absurd as any other human attempt at battling mortality.
**LEGIO VIII QUANTAE. “THE QUANTUM RESURGENCE AFTER THE FALL OF SILICON VALLEY”**
Dir. Andrea Rodriguez Blanco (Spain)
4 min I Spanish with English subtitles

Legio VIII Quantae is a settlement established in León in 2022, after the fall of the “Silicon Empire”. To stop the economic loss that the city was suffering after the end of the Moore’s Law, a group of physicists founded the Quantum Academy of Arts and Science. The resulting "Technological Quantum Empire" spreads nature’s quantumness through society, to people of all ages and professions, in this future envisioned by Andrea Rodriguez Blanco and her team in Spain.

**QED**
Dir. Chetan V. Kotabage (India)
5 min

Physics is personified in this short film from Professor Chetan V. Kotabage and his team in India. Depressed and anguished, E (Electron) approaches N (Nature). Though N arranged for E’s removal from a nucleus through beta decay, he was not aware of the drama she went through. N offers her a chance to prove her substance - with the catch that it requires huge personal sacrifice. E stands at a junction where she has to make a choice. Chetan previously won the Quantum Shorts People’s Choice and Runner Up in 2016 with The Guardian.

**SLIDE!**
Dir. Thomas Tay Li Guo (Singapore)
4 min

A detective, a serial killer and a parallel universe provide the framework for this quantum thriller. Slide! was directed by student Thomas Tay Li Guo and filmed in Singapore. Try to keep track as the characters meet their parallel selves. Science hasn’t yet shown us a way to move between universes – or even proved if they exist - but it’s incredible to consider there could be other yous living very different lives.
UNDER MY BED
Dir. Paco Freire (Spain)
30 sec  I Spanish with English subtitles

If quantum objects can be in two places or states at once, what is true and what is not? What is the shadow and what the reality? Spanish filmmaker Paco Freire presents a pithy, horror-style take on quantum superposition. The idea came from his five year-old twin sons, one of whom stars in this short. Prepare for 30 seconds of suspense.