

Wonder Materials — Graphene and Beyond

*Hong Kong Science Museum
Until 18 April*

Graphene — sheets of carbon one-millionth the thickness of a human hair and 200 times as strong as steel — was known to exist from the 1940s, but wasn't isolated until 2004. That year, physicists Andre Geim and Konstantin Novoselov at the University of Manchester, UK, managed to separate a flake of graphene one atom thick from a lump of graphite using sticky tape (six years later, they won the Nobel Prize in Physics). This highly useful material is now making its mark in industry, with applications in everything from speciality batteries to tennis rackets. Along with its discovery and commercial applications, this exhibition focuses on the material's possible future.

Time Unwrapped

*King's Place, London
6 January – 31 December*

This year-long series of more than 50 musical and spoken-word events explores humanity's relationship with time. Kicking off with a talk on timekeeping by David Rooney, keeper of technologies and engineering at London's Science Museum, the series meanders through an eclectic mix of lectures, Bach cantatas, jazz and folk concerts. Cosmologist Malcolm Longair and music critic Tom Service will ponder musical revolutions of the early twentieth century that paralleled Albert Einstein's development of relative time. The line-up also includes experimental physicist Helen Gleeson, who produced the first graphene-based liquid-crystal device; a dramatic recreation of Douglas Adams's novel *Dirk Gently's Holistic Detective Agency* (William Heinemann, 1987) by actor Geoffrey McGivern; a "human clock" by Hang player and percussionist Manu Delago and others; and a collage by pianist Alasdair Beatson that melds music by Beethoven with the nocturnal sounds of insects.

The Beautiful Brain: The Drawings of Santiago Ramón y Cajal

*Grey Art Gallery, New York City
9 January – 31 March*

Spanish pathologist and Nobel laureate Santiago Ramón y Cajal was a founder of modern neuroscience and an accomplished artist. His dissections and drawings of the human brain in the late nineteenth century provided definitive evidence that the nervous system is made up of discrete cells, including neurons. Ramón y Cajal also discovered a new type of cell, later named after him, amid neurons in the gut. Some 80 of his drawings are in this touring show, which opened at the Weisman Art Museum in Minneapolis,

Minnesota, and will move to the MIT Museum in Cambridge, Massachusetts, in May.

The World of the Fatimids

*Aga Khan Museum, Toronto, Canada
10 March – 2 July*

The educational, scientific and artistic legacy of the Fatimids, an Arab dynasty that ruled over swathes of North Africa in the tenth and eleventh centuries AD, features in this sumptuous show. In Cairo, the Fatimids founded one of the world's oldest degree-granting educational institutions — Al-Azhar University — in 970, as well as one of the era's greatest libraries. And their rule advanced science: the pioneer of optics Ibn al-Haytham, for example, lived in Cairo under the caliphate. The exhibition features marble reliefs from Cairo's Museum of Islamic Art, masterpieces in metal, and ceramic lustreware, a Fatimid innovation. Drone videography and virtual-reality films provide a peek at what the Egyptian capital might have looked like a millennium ago.

KING TUT: Treasures of the Golden Pharaoh

*California Science Center, Los Angeles
24 March 2018 – January 2019*

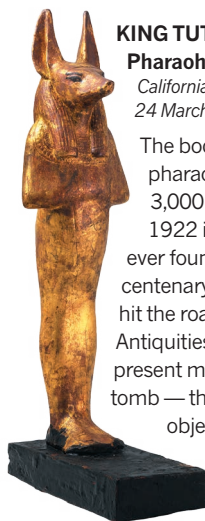
The body of Tutankhamun, the child-pharaoh who ruled Egypt more than 3,000 years ago, was discovered in 1922 in the most complete royal tomb ever found in the region. As we near the centenary of that find, Tut's belongings hit the road. The Egyptian Ministry of Antiquities is working with partners to present more than 150 artefacts from the tomb — the largest assembly of original objects ever displayed outside Egypt.

(Previous tours, including the 1970s Treasures of Tutankhamun exhibition that drew more than 8 million visitors to its US sites alone, featured about 50.) This year's show includes a life-size wooden statue of Tutankhamun, a gilded ceremonial bed, a statue of the god Duamutef (pictured) and a jewelled coffinet that held the pharaoh's liver. His famous death mask and mummified body remain in Egypt. The exhibition will move on to Europe after its Los Angeles premiere.

Fashioned from Nature

*Victoria and Albert Museum, London
21 April 2018 – 27 January 2019*

'Fashion victim' will gain a whole new meaning at this show. For centuries, nature has fallen prey to fashion frenzies. In the Victorian era, for example, birds' body parts were used to make jewellery and trim hats; an 1875 pair of earrings made from the taxidermied heads of honeycreepers (pictured) will be



IN A CINEMA NEAR YOU...

Alongside the usual offerings of superhero sequels and Star Wars flicks, 2018 brings a handful of hotly anticipated science-tinged films, from fantasy to nearly-non-fiction.



Annihilation From Alex Garland, writer-director of *Ex Machina* (2015), comes the story of a biologist (Natalie Portman, pictured), an anthropologist, a psychologist and a surveyor on an expedition into Area X. What they find in this bizarre, alien-influenced environmental disaster zone is unexpected. US release: 23 February.

A Wrinkle in Time This adaptation of Madeleine L'Engle's classic 1963 sci-fi story, directed by Ava DuVernay, features a star-studded cast that includes Oprah Winfrey, Reese Witherspoon and Chris Pine. Learning that her astrophysicist father is held captive on a distant planet, youthful heroine Meg Murry works with family and a band of unusual friends to save him. US release: 9 March.

Ready Player One Steven Spielberg directs the film of Ernest Cline's 2011 novel. In a dystopian 2040s, people escape overpopulated slums by living, studying and working in a virtual reality, the OASIS. When its quirky creator dies, he leaves behind a treasure hunt for his fortune — and a pack of teenagers aim to beat big business to the prize. US release: 30 March.

First Man NASA's mission to land a man on the Moon gets the Hollywood treatment, with Ryan Gosling as Neil Armstrong. The rights to the book were bought in 2003, but filming — directed by Damien Chazelle, who worked with Gosling on 2016's *La La Land* — began only after Armstrong's death in 2012. US release: 12 October.