

SATURDAY 03 AUGUST 2019

SAT 19:00 The Last Seabird Summer? (b072wvv9)
Trouble at Sea

Picking up the birds' progress in July, Adam finds the Shiant colonies to be healthy and the puffins, guillemots and razorbill bringing in great bill-fuls of gleaming silver fish for their chicks. But elsewhere, the sea is failing to provide the birds with the food they need to survive.

In Scotland alone, 40 per cent of the birds have been lost and, further afield in Iceland, Adam sees colonies where nearly all the birds have been wiped out. He discovers how puffin hunters respond to the crisis and talks to both local people and experts about what could lie behind the catastrophic seabird declines. With the help of leading ornithologists and marine scientists, he begins to reveal an unexpected picture of the global forces driving the crisis, and the possible future for our seabird world.

SAT 20:00 New Zealand: Earth's Mythical Islands (b07lp34)
Cast Adrift

Isolated since the time of the dinosaurs, New Zealand's wildlife has been left to its own devices, with surprising consequences. Its ancient forests are still stalked by predators from the Jurassic era. It's also one of the most geologically active countries on earth.

From Kiwis with their giant eggs, to forest-dwelling penguins and helicopter-riding sheep dogs, meet the astonishing creatures and resilient people who must rise to the challenges of their beautiful, dramatic and demanding home.

SAT 21:00 Below the Surface (m0007f3x)
Series 2

Episode 1

Danish thriller series. A woman uncovers evidence of Danish soldiers being killed while fighting in Syria, despite there being no official acknowledgement of their involvement. Then she is kidnapped.

In Danish with English subtitles.

SAT 21:45 Below the Surface (m0007f40)
Series 2

Episode 2

June escapes her captors. Now ex-detective Philip Norgaard and her hostage taker Mahdi are in a race to find her.

In Danish with English subtitles.

SAT 22:30 Merely Marvelous - The Dancing Genius of Gwen Verdon (m0007f42)

Merely Marvelous is a celebration of the life and artistry of Broadway's greatest dancing star, Gwen Verdon. She overcame many obstacles, including rickets, the Hollywood system, a loveless first marriage and a difficult second marriage to choreographer/director Bob Fosse, to become a multi-Tony Award-winning performer.

Gwen's life is told through interviews with family members and theatre associates as well as a mine of rare footage from her Broadway and Hollywood careers. Merely Marvelous is the story of a brave woman who rose to the very top of her profession.

SAT 23:45 Sinatra: All or Nothing at All (b066d739)
Series 1

Episode 4

An up-close and personal examination of the life, music and career of the legendary entertainer. In 1971, Frank Sinatra sang his legendary 'retirement concert' in Los Angeles, featuring music which was said to reflect his own life. Told in his own words from hours of archived interviews, along with commentary from those closest to him, this definitive four-part series weaves the legendary songs he chose with comments from friends and family, as well as never-before-seen footage from home movies and concert performances.

An unprecedented tribute to the beloved showman, with the full participation of the Frank Sinatra Estate, the final episode recounts the kidnap of his son, Frank Jr, his marriage to Mia Farrow and his successful return from retirement.

SAT 00:45 Can You Feel It - How Dance Music Conquered

the World (b0bhctc)
Series 1

The Club

This episode celebrates the club. From Studio 54, The Loft and Paradise Garage to Shoom, illegal raves, The Hacienda, Cream and on to the contemporary megaclub brands in Las Vegas and Ibiza.

Telling the story of how club culture went from shady Chicago lofts to desert casinos. Along the way we learn about the pioneering sound systems that powered the clubs that transitioned disco into house.

Studio 54 DJ Nicky Siano takes us to see the last Richard Long system - in a fairground on Coney Island. Paul Oakenfold takes us to the place he considers to be the birthplace of modern day dance culture - a back alley in Streatham, south London. New Order members Stephen Morris and Bernard Sumner recall the trip that led to the birth of The Hacienda.

We end with the multi-billion dollar business of modern clubbing where huge dance events dominate and clubbers in Las Vegas can pay \$50,000 for a table by the dance floor. Has the corporate dance experience killed the true meaning of clubbing?

SAT 01:45 R.E.M. at the BBC (b019g9vf)

In September 2011 R.E.M., the rock band from Athens, Georgia, decided to call it a day after 31 years. This collection from the BBC archives includes performances of Pretty Persuasion from the Old Grey Whistle Test in 1984, Orange Crush on Top of the Pops in 1989 and special acoustic versions of Losing My Religion and Half a World Away on The Late Show in 1991, along with performances on Later with Jools Holland and Parkinson. Also, vocalist Michael Stipe and bassist Mike Mills reflect on the band ending.

SAT 02:45 Size Matters (b0bbyjv0)
Series 1

Big Trouble

This two-part special presented by Hannah Fry shows that when it comes to the universe, size really does matter. Hannah takes the audience into a thought experiment where the size of everything can be changed to reveal why things are the size they are.

Hannah starts her journey by asking whether everything could be bigger, finding out what life would be like on a bigger planet. As the Earth grows to outlandish proportions, gravity is the biggest challenge, and lying down becomes the new standing up. Flying in a Typhoon fighter jet with RAF flight lieutenant Mark Long, the programme discovers how higher G-force affects the human body, and how people could adapt to a high G-force world. But by the time Earth gets to the size of Jupiter, it's all over, as the moon would impact the planet and end life as we know it.

Next, Hannah tries to make living things bigger. The programme examines the gigantopithecus, the biggest ape to ever exist, creates a dog the size of a dinosaur and meets Sultan Kosen, the world's tallest man. Humans are then super-sized with the help of Professor Dean Falk to see what a human body would look like if we were 15m tall.

The sun gets expanded, and Professor Volker Bromm looks back in time to find the largest stars that ever existed, before the sun explodes in perhaps the biggest explosion since the big bang.

SUNDAY 04 AUGUST 2019

SUN 19:00 What Do Artists Do All Day? (b067fxfp)
Sir Peter Blake

Often described as the godfather of British pop art, over the past sixty years artist Sir Peter Blake has enjoyed a celebrated career. Famous for his Beatles' Sgt Pepper's album cover, he has produced a vast body of paintings, collages and album covers. In 2015, aged 82, Peter was commissioned to produce his largest work to date, the re-design of a Mersey ferry. In this film, we spend time with Peter at work in his studio and follow the process of the ferry's pop art makeover, from Peter's early drawings to the launch in Liverpool, revealing an iconic British artist still as active today as he ever was.

SUN 19:30 Brighton: 50 Years of Gay (m0007f44)

2017 marked the 50th anniversary of the Sexual Offences Act 1967, which legalised male homosexuality. Broadcaster and gay rights activist Simon Fanshawe examines this landmark change in the law and reveals the extraordinary story of the fight for

equality through the colourful history of his hometown of Brighton.

SUN 20:00 BBC Proms (m0007f46)
2019

Rachmaninov and Shostakovich

Tom Service and Jess Gillam introduce an evening of light and darkness. John Storgårds conducts the BBC Philharmonic in two dark Russian classics, Rachmaninov's atmospheric The Isle of the Dead and Shostakovich's broody Symphony No 11, 'The Year 1905'. Bringing light and hope is the world premiere of Finnish composer Outi Tarkiainen's Midnight Sun Variations.

SUN 22:00 BBC Proms (m0007f48)
2019

Angélique Kidjo

Three-time Grammy Award-winner Angélique Kidjo makes her Proms debut together with her nine-piece band in a late-night tribute to salsa legend Celia Cruz. Clara Amfo explores the links between the music of Cuban diva, Cruz and the traditional Yoruba music that came to America during the slave trade, and how Kidjo has combined these influences with the west African Afrobeat and juju styles.

SUN 23:25 Arena (b09vgvj8)
Stanley and his Daughters

'Children of geniuses tend to have a rather hard time of it. If you're a genius you have to be a bit tough', says Unity Spencer, daughter of Stanley Spencer, one of the most important 20th-century British artists.

Stanley's visionary art, his obsession with his work and the drama of a private life described as 'the most bizarre domestic soap opera in the history of British art' wreaked havoc on his family.

The break-up with his first wife, fellow artist Hilda Carline, was traumatic for his daughters Unity and Shirin. So too, was the fiasco of their father's second marriage to self-confessed lesbian, Patricia Preece.

The daughter's separation, post-divorce, took root in their lives and only now, in old age, have they come together again. Last summer, Unity packed up her Clapham home of 40 years, boxed up her old life, her father's drawings, sketchbooks and letters and moved to Wales to be close to Shirin. With Unity's son John, Stanley's grandson, they plan to live altogether.

The film explores the sisters' relationship - fractured, fraught but ultimately loving - as they try to understand and reclaim their father and investigate their family's archaeology. Unity, now 87, and Shirin, 91, begin a late rapprochement and attempt to become a family again as they build a new life together. Through them, the film provides an insight into Stanley's life, motivations and his art - offering a completely fresh take on one of Britain's and the 20th century's greatest artists.

With access to Stanley's and Hilda's correspondence, the film reflects on an extraordinary cache written over 30 years that John Spencer is painstakingly transcribing. These, together with a further nine years of letters which Stanley wrote to Hilda after her death, run to millions of words.

SUN 00:40 Can You Feel It - How Dance Music Conquered the World (b0bm6tp)
Series 1

The DJ

In the final, part we tell the story of the DJ. With a cast that features today's biggest DJ stars alongside house pioneers, we plot the DJ path from invisibility to centre stage. How is it that people who play records are today's highest paid music stars? As Norman Cook says, 'There's two types of people in the world. Those that hear a record they like and have to listen to it over and over again in their headphones. They're called normal people. Then there's another kind that as soon as they hear a record they like, they have to play it to loads of other people. And they're called DJs'.

Today the DJ is a major celebrity. Rich, influential and very powerful. As David Guetta says, 'It was impossible to think that we were going to become the biggest musical phenomenon in the world. But we did it'.

We follow the record box from Greg Wilson - demonstrating mixing two records on a 1980s edition of The Tube - through Ibiza vibe-pioneer Alfredo, to Paul Oakenfold's legendary sets at acid house night Spectrum. And we tell the stories of today's megastar mixers. DJs who earn upwards of \$50 million a year.

With in-depth interviews with David Guetta, Steve Aoki, Tiesto, Paul Van Dyk, Black Madonna, Moby and Midland, we discover the highs and the inevitable lows of this new brand of music stardom. The sometimes isolated existence of the lone DJ is brought in to sharp focus by the recent tragic death of 28-year-old Swedish House megastar Avicii.

Other contributors include Pete Tong, Jeff Mills, Terry Farley, Fabio and Nina Kravitz.

SUN 01:40 What Do Artists Do All Day? (b067fxfp)
[Repeat of broadcast at 19:00 today]

SUN 02:10 Brighton: 50 Years of Gay (m0007f44)
[Repeat of broadcast at 19:30 today]

SUN 02:40 Size Matters (b0bcv22w)
Series 1

That Shrinking Feeling

This two-part special presented by Hannah Fry shows that when it comes to the universe, size really does matter. Hannah takes the audience into a thought experiment where the size of everything can be changed to reveal why things are the size they are.

Having discovered in the first episode that making things bigger ends in disaster, in episode two, Hannah is going the other way by asking whether everything could, in fact, be smaller. But going smaller turns out not to be much safer...

First, we shrink the Earth to half its size - it starts well with lower gravity enabling us to do incredible acrobatics, but things gradually turn nasty as everyone gets altitude sickness - even at sea level. Then we visit Professor Daniel Lathrop's incredible laboratory, where he has built a model Earth that allows us to investigate the other effects of shrinking the planet to half size. The results aren't good - with a weaker magnetic field we would lose our atmosphere and eventually become a barren, lifeless rock like Mars.

In our next thought experiment, we shrink people to find out what life is like if you are just 5mm tall. We find out why small creatures have superpowers that seem to defy the laws of physics, meet Jyoti Amge, the world's smallest woman, and with the help of Dr Diana Van Heemst and thousands of baseball players reveal why short people have longer lives.

Lastly, the Sun gets as small as a sun can be. We visit the fusion reactor at the Joint European Torus to find out why stars have to be a minimum size or fusion won't happen. And if our Sun were that small? Plants would turn from green to black, and Earth would probably resemble a giant, frozen eyeball.

Which all goes to show that size really does matter.

MONDAY 05 AUGUST 2019

MON 19:00 Beyond 100 Days (m0007f3t)
Series 1

05/08/2019

The latest news, exploring the day's events from a global perspective.

MON 19:30 Venice 24/7 (b01f17z4)
The Biennale

With unprecedented access to Venice's emergency and public services, this series goes behind the 15th-century facades to experience the real, living city. From daily emergencies to street sweeping, bridge maintenance to flood defence systems and a death-defying descent across St Mark's Square, this is Venice as you've never seen it before. This is Venice 24/7.

The art world descends on Venice for the Biennale, a six-month long festival. Anish Kapoor attempts to stage his ethereal Ascension in a challenging Palladian church while another artist battles to transport a four-tonne sculpture along the canal. The Venice theatre undergoes critical safety checks, following the devastating fire of 1996 and a 100,000-tonne cruise-liner must execute inch-perfect manoeuvres as it travels perilously close to the historic centre.

MON 19:50 Arena (b00dn7hf)
Philip Hoare's Guide to Whales

Baleen

Acclaimed author and whale-watcher Philip Hoare takes us into

the world of baleen whales, the largest animals ever to have lived.

With plates of bristly baleen instead of teeth with which they filter their food, blue whales, fin whales and humpback whales swim the Atlantic. Hoare shows us how to identify whales from their tails or flukes, and explores the strange shared history between humans and whales.

MON 20:00 Operation Grand Canyon with Dan Snow (p01m5pjjg)
Episode 1

Dan Snow and team take on the rapids of the Grand Canyon in antique wooden boats to rediscover one of the wild west's great adventures of discovery.

MON 21:00 James May's Toy Stories (b04wtd18)
Action Man at the Speed of Sound

James May attempts to rehabilitate one of Britain's most derided toys by seeing if it's possible for Action Man to do what no toy has ever managed - travel faster than the speed of sound.

For decades Action Man, despite his name, has been a disappointment. He promised so much with his eagle eyes, his gripping hands and his natty outfits. But what has he ever achieved? Nothing... yet.

After half a century lazing around the back of the toy cupboard, he must prove that he has The Right Stuff, redeem his shattered reputation and boldly go where no toy has gone before.

The challenge is daunting. Breaking the sound barrier and returning Action Man safely to the earth will test James and the team to the limit.

In an action-packed series of attempts, James battles high-speed physics, unforeseen explosions and catastrophic design setbacks that account for a large number of Action Man volunteers before settling on an experimental supersonic vehicle made entirely from scratch - a vehicle that threatens to send Action Man and the team into oblivion.

In a gripping final act, Action Man must not only succeed and survive intact, but also go faster and higher than a rival supersonic attempt led by his arch-nemesis - Sindy.

Will Action Man redeem himself? Will he survive Mach 1? Or will he lose out?

MON 22:00 Life (b00p1n00)
Hunters and Hunted

Mammals' ability to learn new tricks is the key to survival in the knife-edge world of hunters and hunted. In a TV first, a killer whale off the Falklands does something unique: it sneaks into a pool where elephant seal pups learn to swim and snatches them, saving itself the trouble of hunting in the open sea.

Slow-motion cameras reveal the star-nosed mole's newly-discovered technique for smelling prey underwater: it exhales then inhales a bubble of air ten times per second. Young ibex soon learn the only way to escape a fox - run up an almost vertical cliff face - and young stoats fight mock battles, learning the skills that make them one of the world's most efficient predators.

MON 23:00 Pedalling Dreams: The Raleigh Story (b08j8mvl)

For the last 150 years, Britain has been a nation of bike lovers. And for much of that time, one make has been associated with quality, innovation and Britishness - Raleigh bikes.

Born in the back streets of Nottingham in 1888, Raleigh grew to become the biggest bicycle manufacturer in the world. For over a century, the company was known for its simple and practical bikes, built to last a lifetime. For generations, its designs were thought second to none, enjoyed by adults and children alike.

Now, with wonderful personal testimony and rare and previously unseen archive film, this documentary tells the extraordinary tale of the ups and downs of Raleigh bikes - a beautifully illustrated story full of remarkable characters, epic adventures and memorable bikes.

Meet the people who rode and raced them, the workers who built them and the dealers who sold them. Find out how cycling saved the life of Raleigh's founder, discover the technological advances behind the company's success and join Raleigh bike riders who recall epic adventures far and wide.

Along the way, the programme takes viewers on a journey back to cycling's golden age - rediscover the thrill of learning to ride your first bike and find out what went on inside the Raleigh

factory, where the company's craftsmen produced some of Britain's most iconic bikes.

Finally, the documentary reveals what went wrong at Raleigh - the battles it had with its rivals, the controversy behind the design of the Chopper and the effect the closure of its factories had on its loyal workers. This is the extraordinary untold story of the rise and fall of Raleigh bikes.

MON 00:00 Cornwall's Native Poet: Charles Causley (b097bcv3)

Charles Causley was one of the great poets of his generation. Born in 1917 in Launceston, north Cornwall, on the edge of Bodmin Moor, the only time he left was for active service in the Royal Navy during the Second World War. His father died when he was a boy as a result of a gas attack in the trenches of World War One and he lived the rest of his life in the same house as his mother. He knew everyone and they knew him. He devoted his life to teaching, poetry and his mum.

Charles Causley said that everything you needed to know about him was in his poetry. He wrote directly from experience about the people of Launceston and the changes in the town, both world wars, his shipmates, local history, myths, animals and God.

MON 01:00 Timeshift (b08dwxhn)
Series 16

Flights of Fancy: Pigeons and the British

Timeshift ventures inside places of sporting achievement, scientific endeavour and male obsession - the lofts of pigeon fanciers - to tell the story of a remarkable bird. As racer, messenger and even beauty pageant contestant, the humble pigeon has been a steadfast part of British life for centuries.

Pigeons have served in two world wars, flown over oceans and crossed barriers of age, class and race to take their place as man's best feathered friend. Meanwhile, pigeon fanciers have contrived to make them faster and more eye-catching, using backyard genetics to breed the perfect bird.

Popular affection for pigeons has nosedived in recent decades due to a growing distaste at what they leave behind, and legislation has seen them chased out of public spaces. But as this programme shows, dedicated British pigeon fanciers are determined to keep their pastime alive. So what does the future hold for the 21st-century pigeon?

MON 02:00 Art of Spain (b008x4bp)
The Dark Heart

Critic and art historian Andrew Graham-Dixon travels from southern to northern Spain to tell the story of some of Europe's most exciting and vital art. He journeys to the country's scorched centre to explore Spanish art of the 16th and 17th centuries. From the mystical world of El Greco to the tender genius of Velazquez, this was a moment so extraordinary it became known as the Golden Age. But beneath the glittering surface was a dark and savage heart. Travelling from the architectural jewel of Toledo to majestic Madrid, Andrew Graham-Dixon traces the rise and fall of the Spanish Empire, the brutal conquest of the New World, and the religious madness of the Inquisition, to discover how a history so violent could produce some of the most beautiful art ever seen.

MON 03:00 Africa: A Journey into Music (b0b5hj14)
Series 1

South Africa

DJ and broadcaster Rita Ray travels to South Africa, home to distinctive vocal harmonies that have travelled all over the world. Visiting Johannesburg, Durban and Cape Town, she discovers the extraordinary songs and harmonies that have given this country a voice abroad. They have often carried messages about inequality and injustice at home, resulting in beautiful music with a real sense of purpose.

South Africa is a diverse nation, and each tribal group has its own musical traditions. Cutting-edge artists sing in ancient languages such as Xhosa, migrant workers stave off homesickness with traditional singing and dancing in the street, whilst four-part harmonies imported from the west are heard in every church, but given an unmistakable South African twist.

TUESDAY 06 AUGUST 2019

TUE 19:00 Beyond 100 Days (m0007f4b)
Series 1

06/08/2019

The latest news, exploring the day's events from a global perspective.

TUE 19:30 Venice 24/7 (b01fd4tm)
When the Boats Come In

For one day the canals are closed and fleets of row boats take to the water. As temperatures soar, Venetians and visitors turn out in their thousands to celebrate the ancient tradition of rowing. At the same time, the police try to rein in speeding motor boats while, on the city's outskirts, an enormous anti-flood system is being built. As the team prepares to lower millions of pounds of technology weighing over 20 tons into the Venice lagoon, nerves are mounting. Without it, Venice is at risk of disappearing under the water.

TUE 20:00 SAS: Rogue Warriors (b08fmyp)
Series 1

Episode 2

With the tragic loss of Jock Lewes, Stirling's second in command is now the newly promoted Captain Paddy Mayne - an officer as unpredictable and dangerous as the new phase of war that is about to begin. Unknown to David Stirling, the Germans are training special units to track, intercept and kill the marauding SAS. The hunters soon become the hunted. The SAS has to adapt if it is going to survive. Disaster strikes when Stirling is captured by the Germans. As the SAS prepare to fight Hitler in Europe, they are without the inspirational leadership of the man who created them.

TUE 21:00 Revolutions: The Ideas that Changed the World (m0007f4d)
Series 1

The Rocket

'The rocket has changed us into a species that is no longer confined to Earth.' - Jim Al-Khalili

The rocket will revolutionise our species, expanding our future into space, but its origins are surprisingly old. Jim Al-Khalili explores the story of humanity's greatest adventure and our grandest dreams. He peers inside the minds of the visionaries who made it possible, using new research and their original notebooks and sketches, bringing these stories to life using state of the art experiments, breathtaking drama and CGI.

He discovers how an explosive exorcism in ancient China gave birth to the first rocket and that French author Jules Verne was the first writer to imagine firing a spaceship to the moon (he used a giant cannon). By chance, Verne's 'From the Earth to the Moon' ended up in the hands of Konstantin Tsiolkovsky, who decided to do the mathematical calculations for firing a ship into space and reasons the only way to get to space is with a 'reaction engine' or rocket.

But to actually create a rocket with the power to break free from Earth's gravity and hurl us towards other worlds will take a leap in technologies for fighting fire, the mechanization of dairy farms and some elaborate Soviet subterfuge.

Today rockets of all types are flying (and some are even landing), but the future holds even more promise with a new kind of rocket, called an ion drive. Running on solar power, ion drives could help us make good on that original dream: to make humans a multi-planetary species.

TUE 22:00 Storyville (b09gvnty)
The Farthest: Voyager's Interstellar Journey

12 billion miles away, a tiny spaceship is leaving our solar system and entering the void of deep space. It is the first human-made object ever to do so. Slowly dying within its heart is a plutonium generator that will beat for perhaps another decade before the lights on Voyager finally go out. But this little craft will travel on for millions of years, carrying a golden record bearing recordings and images of life on Earth.

The story of Voyager is an epic of human achievement, personal drama and almost miraculous success. Launched 16 days apart in 1977, the twin Voyager space probes have defied all the odds, survived countless near misses and almost 40 years later continue to beam revolutionary information across unimaginable distances. With less computing power than a modern hearing aid, they have unlocked the stunning secrets of our solar system.

The Farthest – Voyager's Interstellar Journey tells the story of these magnificent machines, the men and women who built them and the vision that propelled them farther than anyone could ever have hoped.

TUE 23:30 The Queen Mary: Greatest Ocean Liner (b07d2wy4)

With exclusive access to the magnificent liner and its extensive archive of film and photographs, this documentary explores the action-packed life of the Clyde-built ship - an epic journey through some of the most dynamic periods of the 20th century.

Built with the blood and sweat of the master craftsmen of the Clydebank shipyards, she helped drag a nation from the depths of the great depression and set sail as a symbol of new hope and a better future. Leaving Southampton on 27 May 1936, her maiden voyage to New York set a new benchmark in transatlantic travel. Designed in peacetime to link the old world with the new, she ferried movie stars, politicians and royalty across the Atlantic, luxuriously cocooned in an art-deco floating palace.

Then, in 1939, she was transformed to challenge the fury of the Nazis in the Battle of the Atlantic. With a wartime record to rival that of the highest-ranking general, she carried whole armies through enemy-infested seas. Hitler offered a bonus of \$250,000 and the Iron Cross to any U-boat captain who could sink the Queen Mary.

When the war was over, the Queen Mary gave passage to thousands of British war brides and children who planned a new life in the New World. The Queen Mary was a great attraction to the rich and famous celebrities of the 1950s and 60s.

From an exclusive interview with singer Johnny Mathis, we find out what it was like to perform on the rough seas of the Atlantic. The liner continued in service until 1967 and is now a floating luxury hotel and museum docked in a custom-made lagoon in Long Beach, California.

TUE 00:30 Archaeology: A Secret History (p0109jny)
In the Beginning

Archaeologist Richard Miles presents a series charting the history of the breakthroughs and watersheds in our long quest to understand our ancient past. He begins by going back 2,000 years to explore how archaeology began by trying to prove a biblical truth - a quest that soon got archaeologists into dangerous water.

TUE 01:30 The Culture Show (b03hcd7)
2013/2014

Wars of the Heart

For those who remained in London during the Second World War, the Blitz was a terrifying time of sleeplessness, fear and loss, but some of London's literary set found inspiration in the danger and intensity. With the threat of death ever present, nerves were tested and affairs began; it was an absolute gift for a writer seeking new material.

Presenter James Runcie tells the story of novelists Graham Greene, Henry Green and Elizabeth Bowen, and American poet Hilda Doolittle, who revelled in the creative and personal freedom they discovered even as the bombs rained down. The programme reveals how these writers distilled the surreal and often frightening atmosphere of the time into some of their finest work.

TUE 02:00 SAS: Rogue Warriors (b08fmyp)
[Repeat of broadcast at 20:00 today]

TUE 03:00 Revolutions: The Ideas that Changed the World (m0007f4d)
[Repeat of broadcast at 21:00 today]

WEDNESDAY 07 AUGUST 2019

WED 19:00 Beyond 100 Days (m0007f6h)
Series 1

07/08/2019

The latest news, exploring the day's events from a global perspective.

WED 19:30 Venice 24/7 (b01fq216)
The Grand Finale

The city comes together to celebrate a 500-year-old religious festival... with a rave. The waterways and canal banks are packed as Venetians eat, drink and get merry. There are drunken party-goers at risk of falling in the water, an unconscious patient that paramedics struggle to reach, argumentative revellers, and a giant firework display to end the series with a bang.

WED 20:00 A History of Scotland (b00fgq72)
Series 1

The Last of the Free

At the dawn of the first millennia, there was no Scotland or England. In the first episode of this landmark series, Neil Oliver reveals the mystery of how the Gaelic Scottish Kingdom - Alba - was born, and why its role in one of the greatest battles ever fought on British soil defined the shape of Britain in the modern era.

WED 21:00 The First Georgians: The German Kings Who Made Britain (b042twvq)
Episode 2

Lucy Worsley's inside story of Britain's imported German dynasty, made with extensive access to the Royal Collection, reaches the reign of George II. She shows how he had to adapt to a growing 'middling rank' in society no longer content with being downtrodden subjects. Affairs of state were being openly discussed in coffee houses, while the king and his ministers were mocked in satirical prints and theatres.

George II was an easy target - grumpy, and frequently absent in Hanover. To his British subjects he became The King Who Wasn't There. But his wife, the enlightened Caroline, popularized a medical breakthrough against smallpox. However, it was their son, Frederick Prince of Wales, who really understood this new world - he had the popular touch monarchy would need to survive into the modern era.

WED 22:00 Mary Beard's Ultimate Rome: Empire Without Limit (b07bkn8x)
Episode 3

In the third episode Mary takes an in-depth look at the question of identity and citizenship within the Roman Empire. What did it mean to be, or to become, Roman, and how did the very different parts of the empire react to Roman rule?

In the beautifully preserved cities of Algeria, incomers and locals mixed to create flourishing communities with a distinct 'more Roman than Rome' frontier identity. Mary follows the trail of one such African Roman from his native land all the way to Britain, where he served as governor - proof that for all the brutality of conquest, there were opportunities too. Here in Britain another picture emerges, of resistance, hybrid culture and incipient British identity. In York and Newcastle, Mary finds the remains of Romans, but not as we might imagine them - a rich African lady, officers from central Europe and a camp follower from Syria.

WED 23:00 Akala's Odyssey (b09sc141)

Writer and hip-hop artist Akala voyages across the Mediterranean and beyond to solve some of the mysteries behind Homer's monumental poem, the Odyssey. Travelling between spectacular ruins, such as the sacred shrine of Delphi or the Greek colonies on Sicily, Akala's journey culminates on the small island of Ithaca, where he ponders the theory that this is the destination which Homer had in mind as he composed the epic.

Along the way, he finds out what Homer's works may have sounded like to their first audiences, discovers how the rhythm of those ancient words connect to the beats of modern hip-hop and comes face to face with the characters from the masterpiece. He also investigates how this epic poem became the cornerstone of Western literature and how his own experiences as an artist have been impacted by a 3,000-year-old classic. Akala has undertaken this quest as part of his mission to compose his own response to the Odyssey - a new hip hop track called Blind Bard's Vision, which turns the tale on its head all over again. This is Akala's Odyssey.

WED 00:00 Tomorrow's Worlds: The Unearthly History of Science Fiction (p026cd65)
Time

Dominic Sandbrook concludes his exploration of the most innovative and imaginative of all genres by considering science fiction's most alluring theme - time travel.

Having the power to change the past or see the future is a deep-seated human fantasy, and writers and film-makers have embraced its possibilities. From HG Wells's pioneering scientist in The Time Machine to Back to the Future's Marty McFly and Doctor Who's titular Time Lord, we've been presented with a host of colourful time travellers and their time machines. But is there always a price to be paid for meddling with the timeline?

Among the contributors are David Tennant, Karen Gillan and Steven Moffat (Doctor Who), actor Christopher Lloyd and screenwriter Bob Gale (Back to the Future), actor Scott Bakula (Quantum Leap) and novelist Audrey Niffenegger (The Time

Traveler's Wife).

WED 01:00 Horizon (b0bb33ht)
2018

How to Build a Time Machine

Time travel is not forbidden by the laws of nature, but to build a time machine, we would need to understand more about those laws and how to subvert them than we do now. And every day, science does learn more. In this film Horizon meets the scientists working on the cutting edge of discovery - men and women who may discover how to build wormholes, manipulate entangled photons or build fully functioning time crystals. In short, these scientists may enable an engineer of the future to do what we have so far been only able to imagine - to build a machine that allows us travel back and forward in time at the touch of a button. It could be you! Science fiction? Watch this space.

WED 02:00 A History of Scotland (b00fgq72)
[Repeat of broadcast at 20:00 today]

WED 03:00 The First Georgians: The German Kings Who Made Britain (b042twvq)
[Repeat of broadcast at 21:00 today]

THURSDAY 08 AUGUST 2019

THU 19:00 Beyond 100 Days (m0007f4h)
Series 1

08/08/2019

The latest news, exploring the day's events from a global perspective.

THU 19:30 Top of the Pops (m0007f4k)

Gary Davies and Nicky Campbell present the pop chart programme, first broadcast on 28 April 1988 and featuring Pat and Mick, James Brown, Fairground Attraction, Brenda Russell, the Primitives, Luther Vandross, Joyce Sims, Bananarama, Will Downing, S'Express and Scott Fitzgerald.

THU 20:00 Skies Above Britain (b07qrd9t)
Conquering the Skies

Skies Above Britain continues with stories of the extraordinary challenges of the skies, both at NATS - the UK's air traffic nerve centre - and up in the air. At NATS, air traffic controllers guide a passenger jet with a major technical fault safely back to the ground and respond to an unidentified flying object detected on the radar screens.

The biggest air race in the world is taking place at Ascot and British Airways captain Paul Bonhomme, who is also one of Britain's fastest race pilots, is out to win the title for a second time before retiring. The aerial slalom course is high risk, with pilots flying at speeds of up to 230mph, metres above the ground.

Stefan is a YouTube video blogger with a new camera-drone, which he has bought to make his videos stand out. After an ill-advised flight in central London, he discovers to avoid arrest he must undertake special training.

Lynne is terrified of flying and hasn't boarded a plane in 17 years. Now she must overcome her fear and brave a flight to Australia to honour her late mother's wishes to have her ashes scattered there.

Ross was told he could never become a pilot because he has restricted growth but now, at 31, he is setting out to prove the doubters wrong by learning to fly.

THU 21:00 Operation Wild (b04dby18)
Episode 1

Clare Balding and vet Steve Leonard find out how developments in human medicine are transforming the way sick animals are treated around the world. Clare discovers how vets in China keep baby pandas alive. Plus, a pioneering operation in Cameroon could transform the life of Shufai the gorilla, and an elephant in Laos with a gunshot wound has to have an x-ray at a human hospital.

THU 22:00 From Ice to Fire: The Incredible Science of Temperature (b09rzqp3)
Series 1

Frozen Solid

Everything around us - from the tiniest insect on Earth to the most distant stars of the cosmos - exists somewhere on a vast scale from cold to hot. In this series, physicist Dr Helen Czerski explores the extraordinary science of temperature. She unlocks the extremes of the temperature scale, from absolute zero to searing heat of stars - and reveals how temperature works, how deep its influence on our lives is, and why it's the hidden force that has shaped our planet and the entire universe.

In episode one, Helen ventures to the bottom of the temperature scale, revealing how cold has shaped the world around us and why frozen doesn't mean what you might think. She meets the scientists pushing temperature to the very limits of cold, where the normal laws of physics break down and a new world of scientific possibility begins. The extraordinary behaviour of matter at temperatures close to absolute zero is driving the advance of technology, from superconductors to quantum computing.

THU 23:00 Joan of Arc: God's Warrior (b05x31w3)

Writer and historian Dr Helen Castor explores the life - and death - of Joan of Arc. Joan was an extraordinary figure - a female warrior in an age that believed women couldn't fight, let alone lead an army. But Joan was driven by faith, and today more than ever we are acutely aware of the power of faith to drive actions for good or ill.

Since her death, Joan has become an icon for almost everyone - the left and the right, Catholics and Protestants, traditionalists and feminists. But where in all of this is the real Joan - the experiences of a teenage peasant girl who achieved the seemingly impossible? Through an astonishing manuscript, we can hear Joan's own words at her trial, and as Helen unpicks Joan's story and places her back in the world that she inhabited, the real human Joan emerges.

THU 00:00 The Secret History of My Family (b0761pjq)
The Nelsons and Margaret Marchant

The story of an Edwardian family trapped in welfare dependency and a mother accused of a shocking crime against her own child. Did the handouts given to Susan Nelson's family by a prosperous charity visitor provide her descendants with the chance to move up in life or was it all down to their own hard graft?

More than a hundred years on, some of Susan's descendants are still locked in patterns of benefit dependency, while others have freed their families from the desperate poverty of their ancestor. Meanwhile, a descendant of Susan's benefactor discovers why her well-to-do ancestor decided to cut off financial support for Susan just when she needed it most.

THU 01:00 Top of the Pops (m0007f4k)
[Repeat of broadcast at 19:30 today]

THU 01:30 Immortal Egypt with Joann Fletcher (b06vpc9y)
The Road to the Pyramids

In the first episode, Professor Joann Fletcher goes in search of the building blocks of Egyptian civilisation and finds out what made ancient Egypt the incredible civilisation that it was.

Joann sees how people here changed, in just a few centuries, from primitive farmers to pyramid builders and finds the early evidence for Egypt's amazing gods and obsession with death and the afterlife.

On her search, Joann travels almost 20,000 years back in time to discover north Africa's earliest rock art, she discovers how the first writing was used to calculate taxes and explores one of the first stone structures on earth - Egypt's first pyramid. Joann ends her journey in the largest monument of them all - the Great Pyramid. Here, she explains how Egypt had now reached a pinnacle - the ultimate society, creating one of the wonders of the ancient world.

THU 02:30 Secret Knowledge (b05270hv)
In Search of Rory McEwen

Jools Holland tells the remarkable story of Rory McEwen - folk singer, blues guitarist, early TV presenter and artist. Rory was Jools's father-in-law, but the two men never met. He died in 1982, aged 50. Born into an aristocratic family in Scotland, Rory became a musician, touring the USA in the 1950s. He had a groundbreaking music show, Hullabaloo, and his Chelsea home was a hub of 1960s London music. Rory abandoned music and TV to focus on botanical art and his paintings are finally being recognised as masterpieces. With contributions from an eclectic cast including Van Morrison, David Dimbleby and Jonathan Miller.

THU 03:00 From Ice to Fire: The Incredible Science of Temperature (b09rzqp3)

[Repeat of broadcast at 22:00 today]

FRIDAY 09 AUGUST 2019

FRI 19:00 World News Today (m0007f4p)

The latest news, exploring the day's events from a global perspective.

FRI 19:30 Top of the Pops (m0007f4d)

Bruno Brookes and Adrian John present the pop chart programme, first broadcast on 5 May 1988 and featuring Joyce Sims, New Order, Magnum, Harry Enfield, the Adventures, Narada, Prince, the Christians, the Primitives, S'Express and Star Turn on 45 Pints.

FRI 20:00 BBC Proms (m0007f4y)
2019

John Wilson Orchestra

Join Katie Derham for what has become one of the highlights in any Prom season. John Wilson's virtuoso orchestra celebrates the music of one of the world's most famous film studios, Warner Brothers. The lush sounds of composers such as Max Steiner and Erich Korngold are among the many pieces played showcasing why this historic studio holds a special place in the hearts of lovers of film music.

FRI 22:15 BBC Proms (b07rkvp4)
2016

Barenboim and the West-Eastern Divan Orchestra

Katie Derham introduces another chance to see one of the most memorable Proms from the BBC archive. This week, she is joined by special guest Stephen Fry for one of his favourite concerts of all time, from the 2016 season.

Daniel Barenboim conducts the West-Eastern Divan Orchestra in Liszt's First Piano Concerto, performed by his childhood friend, legendary pianist Martha Argerich, along with epic orchestral extracts from three different operas by Richard Wagner.

FRI 22:30 BBC Proms (m0007f52)
2019

The Sound of Space

Cerys Matthews introduces a late-night Prom featuring music from sci-fi films. The award-winning London Contemporary Orchestra perform excerpts from cult soundtracks together with recent works by Hans Zimmer and Mica Levi. Fans of Alien: Covenant, Interstellar, Under the Skin and Gravity will immediately recognise and enjoy the repertoire.

FRI 23:45 Top of the Pops (m0007f4d)
[Repeat of broadcast at 19:30 today]

FRI 00:15 Rock 'n' Roll Guns for Hire: The Story of the Sideman (b08xdlts)

Film shining a spotlight on the untold story of the sidemen, the musicians behind some of the greatest artists of all time. The sidemen are the forgotten 'guns for hire' that changed musical history. Featuring interviews with Mick Jagger, Billy Joel and Keith Richards, taking viewers from the 1960s to today, via global stars such as Prince, David Bowie, The Rolling Stones and Beyonce.

FRI 01:45 Reggae Fever: David Rodigan (b0brzpsb)

David Rodigan's unlikely career as a reggae broadcaster and DJ has developed in parallel with the evolution of Jamaican music in the UK. His passion and his profession have given him a privileged, insiders' view of the UK's love affair with Jamaican music that began in the 1950s. His constant championing of it has afforded him national treasure status with generations of British Jamaicans and all lovers of reggae music.

This is a film about the career of David Rodigan but it's also a window through which to see a wider human story about social change in the UK: a story of immigration and integration, and music's role within it.

The beginning of his career conjures up a forgotten era when reggae was reviled by liberal, hippyish music fans because of its association with skinheads. At one point, his fellow students agreed to share a house with him only if Rodigan agreed not to play reggae. Instead, he would haunt London's specialist record

shops and sneak out to Jamaican clubs alone.

His break first came on BBC Radio London, where his knowledge and infectious enthusiasm won him the gig. Since that first break, he's had shows on Capital, Kiss and now BBC Radio 1Xtra and BBC Radio 2. In the 80s, his radio show became such a Sunday lunchtime fixture in London's West Indian households that it was colloquially known as 'rice 'n' peas'. Bob Marley personally chose Rodigan's show to play out the world exclusive of Could You Be Loved.

As well as being a DJ, Rodigan also began to 'soundclash' on a global stage. This musical competition where crew members from opposing sound systems pit their skills against each other involves the playing of records in turn, with the crowd ultimately deciding who has 'killed' the other crew, by playing the better chosen track. But standard versions of tracks don't cut it in a clash, where the true currency is 'dubplates' - versions of tracks recut, often by the original artist, with lyrics changed to praise the playing crew or diss the opposing one.

In Jamaica, after he began clashing live on national radio with DJ Barry G, he became so famous that his name was even adopted by a Kingston gangster. He began competing on the World Soundclash stage alongside the likes of Jamaica's Stone Love and Japan's Mighty Crown as the soundclash became a global phenomenon. David is probably the only person ever to have been awarded an MBE and the title of World Clash Champion.

In recent years, Rodigan's live DJ appearances have started attracting a far younger audience. It can be seen as a reflection of the way different forms of music from the different cultures that have arrived in Britain over the last 70 years have integrated, taken root and spawned new scenes, attitudes and tastes.

As well as appearing at student unions across the country and continuing to clash by himself, he's also now a part of clash crew Rebel Sound, first assembled for Red Bull Culture Clash in 2014. In this environment, David found himself amidst a melting pot of beats, loops and popping, infectious bass-driven riddims - playing to the kids who are discovering him and therefore reggae music through other artists.

Now in his 40th professional year, David is quite rightly celebrating, his passion for the music he loves burning as brightly as ever. This film is a testament to this most unlikely of reggae aficionados - a celebration of a man whose story is strangely intertwined with not only the evolution of music in this country but also the evolution of the culture.

FRI 02:45 The Last Pirates: Britain's Rebel DJs (b096k6g1)

In the 1980s a new generation of pirate radio stations exploded on to Britain's FM airwaves. Unlike their seafaring swinging 60s forerunners, these pirates broadcast from London's estates and tower blocks to create a platform for black music in an era when it was shut out by legal radio and ignored by the mainstream music industry.

In the ensuing game of cat and mouse which played out on the rooftops of inner-city London across a whole decade, these rebel DJs used legal loopholes and technical trickery to stay one step ahead of the DTI enforcers who were tasked with bringing them down. And as their popularity grew they spearheaded a cultural movement bringing Britain's first multicultural generation together under the banner of black music and club culture.

Presented by Rodney P, whose own career as a rapper would not have been possible without the lifeblood of pirate radio airplay, this film also presents an alternative history of Britain in the 1980s - a time of entrepreneurialism and social upheaval - with archive and music that celebrates a very different side of Thatcher's Britain.

Featuring interviews with DJs, station owners and DTI enforcers - as well as some of the engineers who were the secret weapon in the pirate arsenal - this is the untold story of how Britain's greatest generation of pirate radio broadcasters changed the soundtrack of modern Britain forever.