

# Breaking The Code; The Enigma of Alan Turing



Friday, December 3

**Handouts:**

Schedule For Term Paper Talks

Lyrics for "Breaking The Code" by This Human Condition

## Schedule of Presentations

### Today

### Monday Morning

### Monday Evening

Emma Borden

Annie Gilliam

Allegra Alfaro

Devin Merker

Niovi Singh

Cassius Reed

Amy Li

Paul Marzella

Alexandra Gannon

Jake Forrest

Sara Hall

Abrahm Geissinger

Skylar Knoop

Adelle Davies

Alexis Zhai

Edie Huffard

## Preview of Coming Attractions

- ▶ Submit Digital Copies of Responses to Turing's 1950 Paper
- ▶ Presentations of Term Projects  
Today: Emma and Annie
- ▶ Discussion of Updegrove's Novel *The Turing Test*
- ▶ Artists React To Alan Turing's Life and Work III  
More Music and Ballet
- ▶ Course Response Forms (Monday)

# Genres

- ▶ Drama
- ▶ Novel and Short Story
- ▶ Film
- ▶ Poetry
- ▶ Painting and Drawing
- ▶ Sculpture and Statuary
- ▶ Music
- ▶ Opera
- ▶ Photography
- ▶ Ballet

## "Breaking The Code" by This Human Condition



Jason Mince (L) and Jamie Jamal (R) are This Human Condition

"Breaking The Code"

## "Breaking The Code" by This Human Condition

# PARDONED

## Queen acts on 1952 homosexuality conviction which destroyed life of wartime codebreaking hero Turing

By Tim Shipman  
Deputy Political Editor

THE Queen will today grant a posthumous pardon for wartime codebreaker Alan Turing, who was convicted in the 1950s for homosexual activity.

The pardon is only the fourth since the Second World War to be granted under the Royal Prerogative of Mercy.

It was requested by Justice Secretary Chris Grieve, who described Turing as a national hero who fell foul of the law because of his sexuality.

During the Second World War, the mathematician was pivotal in cracking the German Enigma codes, which gave Allied leaders vital information about the movements and intentions of Hitler's forces.

Historians credit the work of Turing and



### Royal Prerogative that's rarely used

THE Justice Secretary has the power to ask the Queen to grant a pardon under the Royal Prerogative of Mercy, for civilians convicted in England and Wales.

They are very rare and are only normally granted when the person is innocent of the offence and where a request has been made by someone with a vested interest such as a family member. Uniquely on this occasion a pardon has been issued without either requirement being met.

Since the end of the Second World War only three pardons have been granted under the Royal Prerogative of Mercy.

# Ballet



Invertigo Dance Theatre's *Formulae and Fairy Tales* places the worlds of mathematics, artificial intelligence and cryptography into a vivid, twisted fairy-tale palette. The multi-dimensional story casts the life of Alan Turing, mathematical genius and World War II codebreaker, into the Technicolor and mythologized ideas of his favorite film, Disney's *Snow White and the Seven Dwarfs*. Step into a world of lush dance, dynamic theatre, math, sex, fairy tales, humor and death.

# Ballet





*Turing's Apple*, created as the centerpiece of RAWdance's 10th anniversary season, was inspired by Alan Turing's dramatic life and groundbreaking intellectual contributions to modern day computer science.. Set in a sea of apples, Turing's Apple seamlessly weaves together the rigorous patterning of Turing's computations, the fantastical imaginings of his dreams, and the deep emotion of his story into a dark, kaleidoscopic journey of Britain's greatest code-breaker.



Turing's Apple

"Mark Smith's choreography is nothing short of incredible"  
Andrew Tomli



Mark Smith Productions

## Hut 8

### Tour Pack: Spring 2021

Choreographer Mark Smith has incorporated mathematical language into his choreography to make a ground breaking trilogy of dance that reveals the complexity, genius & diversity of Alan Turing. Punished for being different, yet Turing's legacy of pioneering the computer makes him relevant today. The trilogy consists of 'Turing's Machine', 'Turing Law' and '3M's.' 'Turing's Machine' is inspired by the invention of the Bombe machine, 'Turing Law' explores Turing's homosexuality & the erasure of Gay history. "3M's" invites all to reimagine Alan Turing's experiments in movement, music and maths and is a collaboration with composer Michael England. Hut 8 can also deliver a workshop for schools KS2 & KS3 devised in collaboration with Bletchley Park, home of the codebreakers.

Hut 8



Jin Wicked, 2003

Alan Turing comes to life in this fine print by the American artist Jin Wicked. Although she has clearly marked his dates, from 1912 to 1954, the iconography obviously suggests a mind which is struggling to reach further into time and space than this brief span allowed.

The theory behind the Turing Test is at the centre of this picture. The looping tape, inscribed with binary 0's and 1's, represents Turing's model of the computer which he formulated in 1936. Its spiralling away into space correctly shows the scope of Turing's theoretical work, which is about what any computer, however large or fast, could do. But its loop through the brain is also a correct picture of Turing's work: he was giving a fresh account of what the action of the mind. The tape is being scanned by the mind's eye, and that is why Turing's eyes are drawn turned inwards. The question it poses is whether the mind can do anything that the computer cannot. Is Turing himself a computer program, operating his pencil blindly? Or his his inner eye seeing something that the computer can never grasp?

Around that central image, Jin Wicked has crowded the space with the material world that defined Alan Turing's life. Behind that schoolboy pencil are the old stone cloisters of his schoolboy life, the rigid and declining British Empire of the 1920s. Sharp collars and old school tie almost throttle the brain. But that tie, its phallic tip awkwardly poking over the stone wall, is the only object which breaks out of the frame and refuses to fit in. This is a fair picture of his sexuality, in one way quite old-fashioned in the cultural base of the English Public School, yet turning into something very modern, insisting on an open identity which may well have been crucial in the background to his death in 1954. For those years were the most paranoid of the new American world order, and Alan Turing held in that brain some of the greatest state secrets of the age. In the left hand lower corner is the Victorian machinery of the Empire, reflecting his mother's family background in engineering. On this base rise images of the electronics of the 1940s which allowed him to turn his idea of a computer into a practical design in 1945-6, and then took him to Manchester in 1948 to organise the first working computer. At the top left are the rotors of the German Enigma cipher machine, which