

TRINITY LABAN CONSERVATOIRE  
OF MUSIC & DANCE

 ROYAL  
MUSEUMS  
GREENWICH

TRINITY LABAN STRING ENSEMBLE

# a change of season

Curated by **Nic Pendlebury**

**Antonio Vivaldi** The Four Seasons

**Hollie Harding** Melting, Shifting, Liquid World

programme

Trinity Laban Conservatoire of Music  
and Dance:

Patron  
HRH The Duke of Kent  
KG GCMG GCVO ADC

Chair  
Alan Davey CBE

Principal  
Professor Anthony Bowne

Director of Music  
Havilland Willshire

Dean of Music  
David Bahanovich

Heads of Department

Keyboard  
Sergio De Simone

Wind, Brass, Percussion  
Andrew Dunn

Voice  
Jennifer Hamilton

Jazz  
Dr. Hans Koller

Composition  
Professor Dominic Murcott

Music Education  
Tim Palmer

Strings  
Professor Nic Pendlebury

Musical Theatre  
Victoria Stretton

Popular Music  
Joe Townsend

Department Coordinators

Wind, Brass, Percussion,  
and Competitions  
Kevin Ashman

Jazz and Strings  
Chris Goodchild

Musical Theatre  
Natalie Harman

Composition and Keyboard  
Peter Nagle

Voice  
Phillippa Scammell

Head of Orchestral Studies  
Jonathan Tilbrook

Head of Music Planning  
Ed Denham

Music Managers  
Howard Felton  
Sara Pay

Orchestra and  
Ensembles Manager  
Alex Regan

Performance  
Operations Manager  
Marianne Chapman

Performance Operations  
Coordinator  
Sarah Anstead

Performance Operations  
Intern  
Andrew McCullough

Professional Placements  
Coordinator  
Alicia Mallace-Goulbourne

CoLab Coordinator  
Mitch Tam

Brand & Communications  
Robyn Bignall-Donnelly  
Imogen Copp  
Lucy Coppens  
Adam Hypki  
Fiona Moorhead  
Richard Scandrett

Development  
Paula Mallottides  
Eleanor Strutt

Customer Services Manager  
LJ Cook

Faculty of Music AV  
Ben Burnett  
benjamin leigh-grosart  
Kit Venables

National Maritime Museum,  
Royal Museums Greenwich:

Digital Programmes Producer  
Hans Biorn-Lian

Content Manager  
James Gill

Learning Programme Coordinator  
Ho Lai

Digital Marketing and Social Media  
Officer  
Victoria Suzman

Senior Manager Marketing and Brand  
Sabine van Vugt

Please ensure that all digital watch alarms, pagers and mobile phones are switched off. The use of still or video cameras or sound recording equipment is forbidden during any performance without permission or prior consent.

## Creative Team

**Anna Morrissey** Director

**Nic Pendlebury** Music Director and Electric Viola Soloist

**Hollie Harding** Composer (Melting, Shifting, Liquid World)

**Carla Goodman** Production Design (Vivaldi)

**Rosie Whiting, Florence Meredith, Estera Parker** and  
**Sophie Donaldson** Original Costume Concept & Design

**Jamie Elless** Soundscapes (Vivaldi)

**Amy Lawrence** Assistant Director, MA Movement: Directing  
and Teaching Placement 2022

**Eliana Echeverry** Additional Arrangement (Choir, Vivaldi)

## Trinity Laban String Ensemble

Violin I

**Greta Papa, Kellija Moncaka, Jiyun Zhang,**  
**Kate Simpson, Enya Barber, Danielle Mac**

Violin II

**Hannah Littlechild, Virag Hevizi, Samantha Hoang,**  
**Paris Rizas Pintzopolous, Congling Wu**

Viola

**Peter Fenech, Natalia Solis Paredes, Leonardo Badila,**  
**Ivan Illingworth**

Cello

**Miguel Villeda Ceron, Amelia Callard, Floora Valila,**  
**Sam Booth**

Double Bass **Alexander Ferkey, Sam Pugh**

Harpsichord **Celia Margalef Boquera**

Guitar **Harold Gordon-Smith**

## Dancers

**Théïa Maldoom**

**Soledad de la Hoz**

**Aimee Dulake**

## Production

**Jonathan Samuels** Production Manager

**Berry den Breeje** Stage Manager

**Euan Holwill** Assistant Stage Manager

**benjamen leigh-grosart** Audio Producer

**David Lovegrove** Mixing and Playback Engineer

**Jacob Slade** Mixing and Playback Engineer

**Angeliki Matsi** Costume Assistant





Welcome to this evening's performance by the Trinity Laban String Ensemble.

I curated *A Change of Season* as a way to engage with one of the most disturbing and immediate issues of our time: Climate Change.

Through the juxtaposition of Vivaldi's iconic masterpiece, *The Four Seasons*, and the immersive sound world of Trinity Laban alum Hollie Harding's *Melting, Shifting, Liquid World*, our thought-provoking programme explores the seasons as they should be and as they may become, using performance as a way to comment on, and respond to, the climate emergency.

I want to inspire our students to use their creative artforms as a tool for change and show that art can carry strong messages into everyday consciousness.

The inspiration for the programme has its origins in a world premiere from 2019, when Hollie was completing her PhD in composition with us. As a composer she is interested in looking at different ways of constructing performance scenarios and exploring the impact this has on compositional processes and the listening experience. Excited by her approach, I invited her to collaborate with me to develop a work for electric viola and the Trinity Laban String Ensemble.

The resulting work *Melting, Shifting, Liquid World* embodies the kind of creative, collaborative and innovative work that sets us apart as London's Creative Conservatoire.

Blending innovative audio technology, promenading musicians and field recordings of *Arctic Sea Ice* made by David Attenborough's sound recordist Chris Watson, it forefronts the consequence of rising temperatures and ocean pollution. It is the first composition to incorporate

the use of open-ear, bone-conduction headsets alongside live acoustic and amplified instruments, letting you experience a multi-layered sonic environment to move around and within.

After its world premiere in 2019, we were set to revive the work in 2020 but this was delayed due to the global pandemic. This gave time to reflect on other works inspired by the climate which is when the idea of staging a reworking of Vivaldi's *The Four Seasons* together with Hollie's piece came to mind.

Music has an incredible capacity to capture emotion and character. From the bird song of Spring to the cracking ice of Winter, Vivaldi evokes the extraordinary sounds of the changing seasons, turning sonnet lines into musical notation. In a similar way, Hollie incorporates Maura Dooley's poem *Still Life with Sea Pinks and High Tide*, evoking the frozen tundra through an array of extended techniques and soundbites.

Putting these two works together has a strong political message and highlights a key issue from an original perspective.

It was also important for me to say something new, to offer a fresh interpretation of Vivaldi's much-loved and much-performed concerti.

To bring the Seasons to life I imagined presenting the work almost like an opera, the musical lines so descriptive and visual that I had very clear and tangible visual ideas of a set and direction in my head. However, I am not a theatre director, so to help me realise my vision we engaged theatre director Anna Morrissey and designer Carla Goodman to give this wonderful programmatic music an amazing visual element. We've combined music, dance, sonnets, soundscapes and movement to bring Vivaldi's score to life as never before.

It's been a lot of hard work putting it all together, but I think the resulting show will take your breath away and inspire you to consider that, if we are not careful, this beautiful world of ours with its glorious variety of seasons will be destroyed for ever.

**Nic Pendlebury**

---

Bone conduction headphones kindly supplied by Shokz.

**SHOKZ**



SOUTH WING

# The Four Seasons

Antonio Vivaldi

Antonio Vivaldi was born in 1678 in Venice, Italy. As well as being a virtuoso violinist and composer he was also a teacher, impresario and an ordained Roman Catholic priest. His distinctive red hair earned him the nickname of Il Prete Rosso (The Red Priest) and in 1703 was appointed violin master at the Ospedale della Pietà, an orphanage where the female wards specialised in musical training. Vivaldi was associated with the Pietà for most of his working life and it is believed that most of his compositions were written to be performed by the female occupants of the orphanage.

Of all his works, his collection of four concerti *The Four Seasons* is perhaps his best known. Likely written when Vivaldi was the court chapel master in Mantua and published in 1725, the concerti were shaped by a set of four Sonetto dimostrativo (Explanatory Sonnets): *La primavera*, *L'estate*, *L'autunno* and *L'inverno*. The author of these sonnets remains questionable, although most historians credit Vivaldi for them.

In the score, each of these sonnets precede each movement, with every line of text cross referenced to a specific musical phrase. For instance, the second line of Spring, "La salutano gl'augeli con lieto canto / The birds greet her with glad song" is rendered by three solo violins imitating birdsong. This strong link between text and music makes *The Four Seasons* one of the earliest known examples of program music.

Almost 300 years after it was published, it is Vivaldi's evocative writing that inspired Trinity Laban's imaginative staging that brings the work to life like never before.

Offering a fresh perspective on this iconic and much-performed work, the dynamic production incorporates dancers, soundscapes by Jamie Elless and choreographed movement directed by Anna Morrissey. Liberated from music stands and physical scores, the players embody the music, assuming the physicality of a sleepy shepherd or a drunken field worker to personify Vivaldi's masterpiece in a visual world designed by Carla Goodman.

To create a rich tapestry of personal artistry where individual talent can shine within the larger whole, each movement of each concerto will be played by a different soloist drawn from the Trinity Laban String Ensemble.

**Nic Pendlebury**



# Explanatory Sonnets

by Don Antonio Vivaldi

Translation Francesco Degrada

## Spring

### *Movement 1*

Spring has arrived, and joyfully  
the birds greet her with glad song,  
while at Zephyr's breath the streams  
flow forth with a sweet murmur.

Her chosen heralds, thunder and lightning,  
come to envelop the air in a black cloak;  
once they have fallen silent, the little birds  
return anew to their melodious incantation:

### *Movement 2*

then on the pleasant, flower-bedecked meadow,  
to the happy murmur of fronds and plants,  
the goatherd sleeps next to his trusty dog.

### *Movement 3*

To the festive sound of rustic bagpipes  
nymphs and shepherds dance beneath the beloved sky  
at the glorious appearance of spring.

## Summer

### *Movement 1*

In a harsh season burned by the sun,  
man and flock languish, and the pine tree is scorched;  
the cuckoo unleashes its voice, and soon  
we hear the songs of the turtle-dove and the goldfinch.

Sweet Zephyr blows, but Boreas suddenly  
opens a dispute with his neighbour;  
and the shepherd laments his fate  
for he fears a fierce squall in coming.

### *Movement 2*

His weary limbs are robbed of rest  
by his fear of fierce thunder and lightning  
and by the furious swarm of flies and blowflies.

### *Movement 3*

Alas, his fears are only too real:  
the sky fills with thunder and lightning,  
and the hailstones hew off the heads of proud cornstalks.

## Autumn

### *Movement 1*

The countryman celebrates with dance and song  
the sweet pleasure of a good harvest,  
and many, fired by the liquor of Bacchus,  
end their enjoyment by falling asleep.

### *Movement 2*

Everyone is made to abandon singing and dancing  
by the temperate air, which gives pleasure,  
and it is the season that invites so many  
to enjoy the sweetness of sleep.

### *Movement 3*

The huntsmen come out at the crack of dawn  
with their horns, guns and hounds;  
the quarry flees and they track it;

already terrified and tired out by the great noise  
of the guns and hounds, the wounded beast  
makes a feeble effort to flee but dies in agony.

## Winter

### *Movement 1*

To shiver, frozen, amid icy snow  
in the bitter blast of a horrible wind;  
to run, constantly stamping one's feet;  
and to feel one's teeth chatter on account of the excessive  
cold;

### *Movement 2*

to spend restful, happy days at the fireside  
while the rain outside drenches a good hundred;

### *Movement 3*

to walk on the ice, with the slow steps  
to move about cautiously for fear of falling;

to go fast, to slip and fall down;  
to go on the ice again and run fast  
until the ice cracks and opens up;

to hear coming out of the iron gates  
Sirocco, Boreas and all the winds at war:  
that's winter, but of a kind to gladden one's heart.

# Melting, Shifting, Liquid World

Hollie Harding

*Melting, Shifting, Liquid World* is an immersive, site-specific piece written for electric viola soloist Nic Pendlebury and the Trinity Laban String Ensemble, for performance on the iconic Great Map at the National Maritime Museum. The work explores themes of climate change and ocean pollution and includes a pre-recorded electroacoustic part that is delivered to the audience over bone-conduction, open-ear headphones. The piece explores the idea of music as an environment that the audience is surrounded by and can move around and within. There are three layers of sound experienced within the piece, the first emerges from the live acoustic string ensemble who are spread-out across the Great Map, the second from the quadrasonic speaker system which amplifies the solo electric viola and audio effects, and the third from bone-conduction open-ear headsets worn by the audience. In this environment sound can therefore happen very close to, far from, and all around the listener. The piece explores the movement of sound around and across these different layers, and around the static or moving audience.

*Melting, Shifting, Liquid World* draws upon three different sound worlds that move and shift between the three layers of sound. The first is pitchless sound which encompasses field recordings of *Arctic Sea Ice* (provided by renowned field recordist Chris Watson), white noise, water sounds, vocal sibilant and fricative consonant sounds and noise-based sounds from the live strings. This includes the performers generating white noise, scraping, and snapping at their instruments, and playing with techniques that encourage overtones and distortion. This sound world is evocative of the volatile and changeable natural world and draws upon sounds of and from the ice, and the ocean.

The second sound world incorporates sonic interpretations of Ocean Monitoring Indicators. Ocean Monitoring Indicators are free downloadable data sets covering the past 25 years of the key variables used to monitor the oceanic trends in line with climate change, including ocean warming, sea level rise and the melting of sea ice. The data sets are produced by the Copernicus Marine Service as a part of the European Union's Copernicus Programme, the world's single largest Earth Observation Programme. The data set that I selected covers the rise in global ocean heat between 1993 and 2016 and includes the mean heat measurements along with the five different sets of measurements that this mean heat is derived from.

I interpreted this sonically, by scaling the heat measurements into audible frequencies (Hertz), using the data to determine the tuning and pitch inter-relationship of six sine waves, one for each set of measurements. As the measurements sit around similar points and all reflect a rise in temperature, I knew that the sonic outcome from

this process would be one of sustained sine tones with interweaving changes of pitch and an overall upward pitch trajectory from the start to finish. I decided, through experimentation, to restrict the pitch range of the sonic interpretation to specific intervals. I found that the reduced scale of the pitch interpretation made the rising trajectory of the pitch of the sine tones much more gradual and less obvious to the listener, reflecting the nature of the slow cumulative changes to the temperature of the ocean over time. The reduced scale of interpretation also created smaller, microtonal differences between the sine tones that in turn generated beating patterns (vibrato) which oscillate at different rates over time, and through manipulation, between the left and right channels. When delivered over the headsets the beating manifests as an aural and a physical sensation for the listener, as the bone-conduction headsets function by delivering micro-vibrations through the cheek bones to the cochlear, bypassing the eardrum. This physical sensation of sound became a new tool that I could utilise within the piece, using it to allow the listener to experience and feel the localisation of sound to the headsets at certain points in the work, and at others working to obscure the origin of sounds for the audience between the different layers.

The final sound world in the piece is that of melody which is primarily heard in the acoustic strings and electric viola, but also emerges in the electroacoustic parts. The electric viola has two main melodic sections at the start and end of the work, that bookend a more turbulent, heavy and gestural middle section. The concluding melodic lament slows into a looped chorale that is eventually obliterated by white noise as the headsets transmit a reading of *Still Life with Sea Pinks and High Tide* (The Silvering, Bloodaxe Books, 2016), spoken into the ears of the audience by the poet herself, Maura Dooley.

The original costume and set design for *Melting, Shifting, Liquid World* was created through collaboration between Rosie Whiting, Florence Meredith, Estera Parker and Sophie Donaldson. Their design was inspired by researching the dramatic effects of human plastic consumption and rising temperatures on the ocean and its inhabitants. Their main focus was to realise their design without further contributing to climate change. To achieve this they worked with reused and recycled materials including 30 second hand boilersuits, 114 used plastic bags, 3 used fishing nets, 6 mattress covers, 4 sacks of ripped plastic garment bags, 50 bottle caps, 1 roll of cellophane, 28 fruit nets and various plastic bottles, fabric scraps and plastic packaging. For this show the costumes have been re-fitted and adjusted by Angeliki Matsi.

Hollie Harding

## Biographies: Creative Team

### Nic Pendlebury

As Head of Strings at Trinity Laban, Pendlebury leads many of the country's top musicians in one of the most vibrant string departments in Europe. In his role, he conducts several of the conservatoire orchestras and ensembles including Trinity Laban's String Ensemble. With them, he has given performances both nationally and internationally, including the Ljubliana and Emilia Romagna Festivals, commissioned new work and recorded the critically acclaimed album *As Above So Below* with jazz saxophonist Julian Argüelles.

As the founder and violist of the Internationally acclaimed Smith Quartet Nic has been at the forefront of the contemporary music scene for over thirty years. The group have pioneered the development of the string quartet genre commissioning over 300 new works, collaborating with and commissioning from such composers as Steve Reich, Terry Riley, Michael Nyman, Gavin Bryars, Graham Fitkin, Steve Martland, Michael Daugherty, Steven Mackey, John Lord, Stephen Montague, Howard Skempton and Django Bates. They have performed in many of the world's most prestigious festivals and recorded albums for BMG, Sony, Decca and Signum, and their best-selling album of music by Philip Glass was described by Gramophone Magazine as "one of the ten most important CDs of contemporary music". They also feature in the Grammy and BAFTA-winning BBC documentary: *Holocaust; A Music Memorial Film* from Auschwitz performing Steve Reich's *Different Trains*.

In more recent years Nic's pioneering and creative spirit has seen him create a new repertoire for the electric viola, including his critically acclaimed transcriptions of Steve Reich's *Electric Counterpoint* and Terry Riley's *Dorian Reeds* both featured on his debut solo album *Multiple*, to be released on the Orchid Classics label this May. Upcoming plans also include a second album of new commissions including Colin Riley's *Fallen Angel*, Dominic Murcott's *Black Earth* and Hollie Harding's *Melting Shifting Liquid World* as well as appearing at this year's Latitude, First Light and Lake District Summer Music festivals. In recognition of his creative work in performance and education Nic was awarded title of Professor in 2018.

### Anna Morrissey

Morrissey studied Social Anthropology at Christ's College Cambridge then trained in dance and then movement at Central School of Speech and Drama. She has directed *A Midsummer Night's Dream* (Nevill Holt Opera), *Julius Caesar* (Guildhall), *Beyond the Deepening Shadows* (Tower

of London), *Beating Heart Cadaver* (The Finborough) and *Taming of the Shrew* (CSSD). As lead artist, she has created *All Together Alone* for RO 8bit and *Our House is your Home* for Open Up Festival (Royal Opera House), *North West* (Camden People's Theatre), *Masque Arias* (RSC New Work Festival), *On Progress* (Hampton Court and Latitude Festival) and *Death of the Unicorn* (Hampton Court). Movement Direction and Choreography credits include *Rigoletto* (Royal Opera House), *Translations*, *ANNA*, *World of Extreme Happiness* (National Theatre), Olivier award winning *Emilia* (Shakespeare's Globe, West End), *The Winter's Tale* (RSC/BBC4), *Imperium and Queen Anne* (West End), *Richard III* (Almeida), *King Charles III* (Almeida, West End, Broadway), *Amadigi* (Garsington Opera), *Macbeth* (Northern Ireland Opera/Welsh National Opera), *Salome*, *The Flying Dutchman*, and *Noye's Fludde* (NI Opera), *Orpheus in the Underworld* (Scottish Opera), *Manon Lescaut* and *The Barber of Seville* (Opera Holland Park), *Hansel and Gretel* (Opera North), *The Magic Flute* (Nevill Holt Opera). Later this year, she will be returning to NHO to direct *Il Barbiere di Siviglia* and to the Linbury Theatre to co-direct *The Last Days*.

### Carla Goodman

Goodman trained in Nottingham, London and New York. Design credits include: *Boeing Boeing*, *Rope* (Theatre by the Lake), *Bystanders* (Cardboard Citizens), *Martha*, *Josie and the Chinese Elvis* (Stephen Joseph Theatre), *Lunatic 19's* (Finborough Theatre); *Lose Yourself* (Sherman Theatre); *Don Juan Comes Back From The War* (RADA), *Romeo & Juliet* (Orange Tree Theatre), *Wolves Are Coming For You* (Pentabus/Everyman Theatre), *Joy* (Stratford East), *Pride and Prejudice* (Nottingham Playhouse and York Theatre Royal), *Looking At Lucian* (Theatre Royal Bath); *Gabriel* (Richmond Theatre and UK Tour), *Ariodante* (Royal Academy of Music), *Heartbreak Hotel* (The Jetty, Greenwich), *As the Crow Flies* (Pentabus & Salisbury Playhouse), *Miss Nightingale* (The Vaults); *How To Date A Feminist*, *Kitchen to Measure* (Arcola Theatre), *Rise* (Old Vic New Voices), *Jack and the Beanstalk* (Cast Theatre Doncaster), *Miss Julie* (Etcetera Theatre), *Pig Farm* (St. James), *Truce* (New Wimbledon Theatre), *What Flows Past The Baltic* (Nottingham Playhouse), *Theatre Uncut* (Traverse Theatre & UK Tour), *Listen*, *We're Family* (Wiltons Music Hall), *Much and Me* (Bush Theatre), *I Am Your Neighbour* (Oval House – site specific), *A New Face For Fast Times* (Soho Theatre), *The Love Project* (Arts Depot & UK Tour), *Nola* (Underbelly, Edinburgh), *Step Live!* (Royal Academy of Dance/Southwark Centre), *Mr Happiness* (Old Vic Tunnels), *Bud Take The Wheel* (Shaw Theatre & Underbelly, Edinburgh).

## Hollie Harding

Hollie Harding is a composer, researcher and curator of contemporary music events in the UK and overseas. She is interested in looking at different ways of constructing musical performance scenarios and exploring the impact this has on compositional processes and the listening experience. Her 2019 piece *Melting, Shifting, Liquid World* is the first composition to incorporate the use of open-ear, bone-conduction headsets alongside live acoustic and amplified instruments to create a multi-layered sonic environment for the audience to move around and within.

Hollie has worked with Alwynne Pritchard, Sjøforsvarets Musikkorps (Norwegian Navy Band), Philharmonia Orchestra, London Symphony Orchestra, London Philharmonic Orchestra, CHROMA, Castalian String Quartet, Ensemble Via Nova (Weimar), DeciBells (Basel) and players from Bournemouth Symphony Orchestra. Her work has been broadcast on Radio 3, Resonance FM and BBC4 and her latest piece will be released by NMC in June 2022.

Hollie has a passion for working with amateur musicians and was 2017 Composer in Residence with CoMA, subsequently led workshops on their Summer School in Orkney, and had pieces performed at their 2018 and 2020 Festivals of Contemporary Music for All. Teaching also plays an important role in Hollie's artistic life and she has been Associate Head of Composition (UG) at the Guildhall School of Music and Drama since 2020.

## Jamie Elless

Jamie Elless is a composer, performer and graphic artist from the Midlands, currently based in London and Birmingham. She is a Gareth Neame scholar at Trinity Laban Conservatoire of Music and Dance, studying composition with Laura Bowler and Gwyn Pritchard and harpsichord with James Johnstone. Jamie completed her BA and MRes degrees in Music at the University of Nottingham, studying the latter as a Henry Thomas Mitchell scholar under the supervision of Elizabeth Kelly and Duncan MacLeod.

Jamie's background as a self-taught folk musician (guitar, bouzouki, guzheng) is integral to her artistic voice. She incorporates graphic design principles into her notational practice, often leading to sonic explorations of the natural, the ethereal and the mysterious. Jamie's music has been performed by: YCP Birmingham (2014-16); 315 Ensemble (2017, 2021); KOMPOSIT (2018); Villiers Quartet (2018); Royal Northern Sinfonia (2019); Weller Collective (2019); James Banner (2021); Duo Selva-Antongirolami (2021); Britten Sinfonia (2021); Terra Invisus (2022) and Riot

Ensemble (2022). She has taken part in masterclasses and workshops with: Judith Weir; Dobrinka Tabakova; Xenia Pestova; Deirdre McKay; Joe Cutler; James Banner; David Liptak; Gianpaolo Antongirolami; Michele Selva and Tim Gill. Jamie won the Final Year Prize in Composition from the University of Nottingham in 2019 and the Bernard Slee Prize for Opera in 2021 and is a finalist in the 2022 Daryl Runswick Composition Competition.

## Théia Maldoom

Théia Maldoom is a dance artist with interests in improvisation, multidisciplinary and collaborative projects. She studied at The BRIT School and in 2020 graduated from London Contemporary Dance School. Some highlights since graduating have been choreographing and performing in Emilio de la Morena's London Fashion Week SS21 presentation, performing in Alice and Synne's site specific work, 'Bodies of Water' on The Southbank, participating in an Artist's Development Programme with Candoco Dance Company, developing her solo improvisation practice with Seke Chimutengwende and co-creating, 'Dance Co-op' a collective with a focus on practices of care that dance and make work together.

## Soledad de la Hoz

Soledad de la Hoz is a freelance dancer, choreographer and teacher based in London. Originally from Spain, she moved to London to further her training at Rambert School of Ballet and Contemporary Dance. She has performed as a dancer in several operas (English National Opera, Opera North, Salzburg Festival, Glyndebourne and Royal Opera House), the Royal Court Theatre, immersive dance projects, film and TV (Taboo, Brave New World, The Crown). Alongside dancing and performing, she also works as an illustrator with the name Drawn by Sole. Soledad is honoured to be performing and working with the String Ensemble cast and creatives.

## Aimee Dulake

Aimee Dulake is a Surrey/London based dance artist, teacher and choreographer that specialises in physical theatre and improvisation. Aimee is a graduate of London Contemporary Dance School where she worked with industry leading teachers and choreographers. Recently she created her solo 'How un-Catholic of you' where she performed at different festivals around the UK. She has also performed at the Royal Opera House, Covent Garden, in their production of Rigoletto 2021 and their revival in 2022

# Science, Sound, Satellites, and The Sea.

Dr. Hayley Evers-King

The Earth is an immensely complex system. It is dynamic; constantly changing in space and time on scales from microns to miles, and seconds to the entirety of geological time. Changes on Earth occur naturally, but also through the impacts that we, as a society, can have on the planet. Like the Earth itself, climate change is a complex topic to understand. Key to this understanding, is the collection of data that can accurately capture the complexity of the Earth system. However, even with all the scientists in the world, it would be impossible to measure and monitor, in person, all the parts of the Earth system that play a role in climate; the oceans, the land, the ice, the mountains, the atmosphere, even life itself. To get the full picture, one tool in the scientist's toolbox is the satellite. From space, data can be collected much more rapidly, in much more diverse forms, and in far greater quantities.

Observing the ocean is particularly important in terms of understanding climate change and its impacts. The ocean covers the majority of the Earth's surface, and is a vast storage reservoir for heat and greenhouse gases. It is home to the microscopic organisms that produce half of the oxygen in the air we breathe – the phytoplankton. Oceans provide a significant food source for over 3 billion people and livelihoods for 8% of the global population. Over 800 million people could be at risk from the effects of climate change induced sea level rise in the coming decades. Plastic has been found ubiquitously throughout the oceans and in nearly all types of marine life that have been surveyed. These are big challenges, which require big approaches to understand and address them. The European Commission Copernicus programme is the largest provider of satellite-based Earth Observation data, providing over 20 terabytes of data every single day (that's the equivalent of watching the entire of *F.R.I.E.N.D.S* 720 times, every day). The data is freely available to all – scientists, businesses, and every citizen of the world. The programme consists of 7 Sentinel satellites (so far, there are many more planned) – they orbit overhead at over 27000 km/hour. This allows them to collect data regularly covering the surface of the Earth, collecting different measurements of all parts of the Earth System. The global oceans are sampled by Sentinel-3, a satellite with 3 sets of sensors to measure the colour of the ocean, its temperature, and its height.

Images produced from the satellite data are indeed beautiful, but a static image cannot convey the scale and complexity that these datasets capture in time and space. Nor can it capture the feelings of awe, fear, and inspiration that come from being able to understand something that is so much vaster than yourself. Communicating this is something that is still a challenge for those of us who work with the data, and are more used to statistical analyses and graphs, but it is something that music can really help with. Ocean processes have patterns that can find analogy in the patterns in music. Some have a cyclic element, the annual changes in seasons that show in the growth of phytoplankton and the greenness of the sea, the interannual oscillations from climate phenomena like El Nino that show in the temperature and height of the sea surface. These are the baselines of the ocean. Then there are dramatic events that rise and fall rapidly – the formation of a harmful algal bloom, the collapse of an ice sheet, or the sudden impact of a storm surge. Like the crash of symbols, or a change in tempo, these events are dramatic. Then there are trends that build more gradually over time, like the warming of the ocean that features in the composition Hollie has created. For me, the soundscape Hollie has produced evokes the sheer scale of both the ocean and the problems it faces. It reminds me of time spent diving, when you can feel like you're totally enveloped in something, but you still get a feeling of great size of the space you're in. The slow, almost imperceptible rise of the music associated with the temperature brings to mind the feeling of knowing the likely future associated with climate change, but feeling powerless to stop it. The other aspect of Hollie's piece, brought in by the string ensemble, is reminiscent of the volatile and dynamic nature of the oceans on much shorter timescales. In this way, a musical composition is able to communicate the complexity of ocean processes that can be observed in the wealth of satellite data we now gather.

Working with Hollie has encouraged me to think about my own work in new ways, and I hope what she has created will encourage all those who attend this event, to gain a new perspective on our oceans, both from space, and through sound.

## Still Life with Sea Pinks and High Tide

by Maura Dooley

Thrift grows tenacious at the tide's reach.  
What is that reach when the water  
is rising, rising?

Our melting, shifting, liquid world won't wait  
for manifesto or mandate, each  
warning a reckoning.

Ice in our gin or vodka chirrup and squeaks  
dissolving in the hot, still air  
of talking, talking.



For more information on forthcoming events at Trinity Laban, please visit [trinitylaban.ac.uk/whatson](https://trinitylaban.ac.uk/whatson)

     @trinitylaban

TRINITY LABAN, KING CHARLES COURT, OLD ROYAL NAVAL COLLEGE, GREENWICH, LONDON SE10 9JF  
TEL: +44 (0)20 8305 4444 | [CONTACT@TRINITYLABAN.AC.UK](mailto:CONTACT@TRINITYLABAN.AC.UK) | [TRINITYLABAN.AC.UK](https://TRINITYLABAN.AC.UK)