



SPHERE-PPL Annual Meeting & Workshop

Environmental Modelling & Forecasting

SPHERE-PPL Team

Wednesday 14th January 2026





Welcome!

Spatial, Health & Environmental Research using
Probabilistic Programming Languages





Agenda

Timings	Activity	Description
9:30-10:00	Arrivals & Registration	
10:00-10:15	Introduction from the SPHERE-PPL Team - Will Pearse	Meet the team and an introduction to the vision
10:15-10:40	Keynote 1 - Julie Smith	ADAS
10:40-11:00	Keynote 2 - Robin Freeman	ZSL
11:00-11:25	Coffee Break	
11:25-11:35	Presentation - Rich Wood	Forecasting Severe System Pressure in the NHS
11:35-12:20	Break-Out Discussion	Activity 1 - Identifying key challenges in environmental science
12:20-12:50	Break-Out Feedback	2-minute presentations on challenges
12:50-13:50	Lunch	



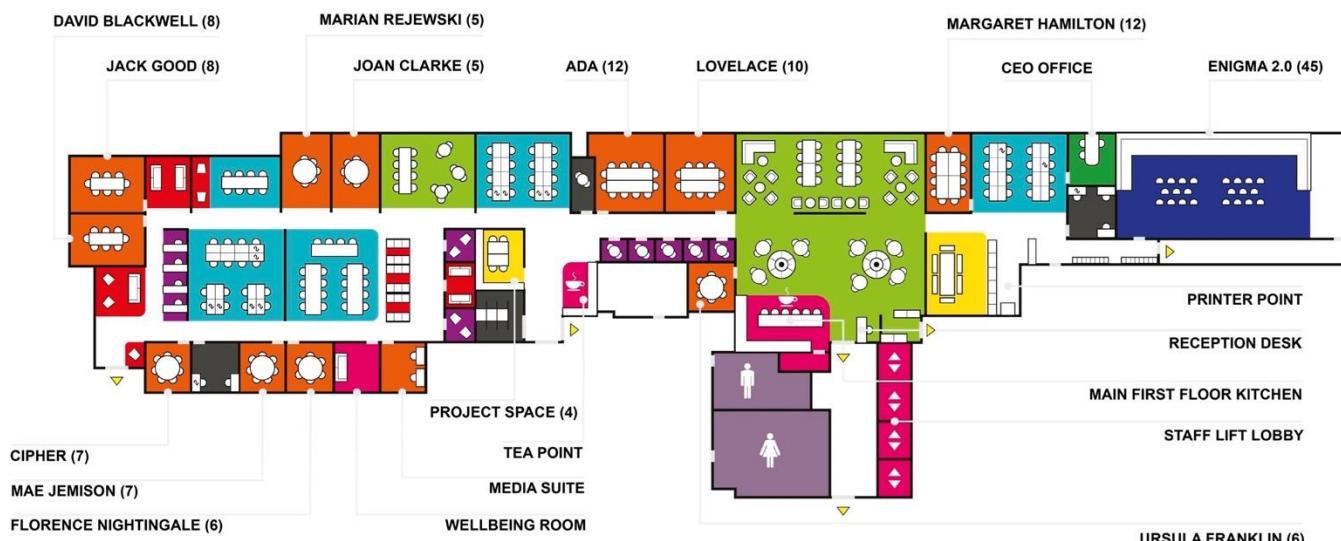
Agenda

Timings	Activity	Description
13:50-14:00	Lyme Disease Contest Prize Giving	
14:00-14:10	Presentation - Will Pearse	Building a Forecasting Contest
14:10-14:45	Break-Out Design	Activity 2 - Groups design forecasting contests
14:45-15:15	Break-Out Feedback	Group feedback and discussion of contest priorities
15:15-15:40	Coffee Break	
15:40-16:05	Keynote 3 - Eric Daub	The Alan Turing Institute
16:05-16:15	Presentation - Will Pearse	What can SPHERE-PPL do for you?
16:15-16:35	Break-Out Discussion	Activity 3 - Brainstorming requests for workshops, training and support
16:35-16:55	Break-Out Feedback	Creating a community priority list
16:55-17:00	Wrap-Up	



Facilities & Accessibility

First floor zoning and capacity plan



Key

- | | | |
|------------------------------|---------------------------------|--------------------------------|
| ■ Open meeting space | ■ Socialising and collaboration | ■ Private/shared offices |
| ■ Bookable meeting space | ■ Desking/workstations | ■ Office facilities |
| ■ Project/team collaboration | ■ Non bookable booths | ■ Training and internal events |
| ▼ Fire exit | ■ CEO office | ▲ Height adjustable desk |

**The
Alan Turing
Institute**

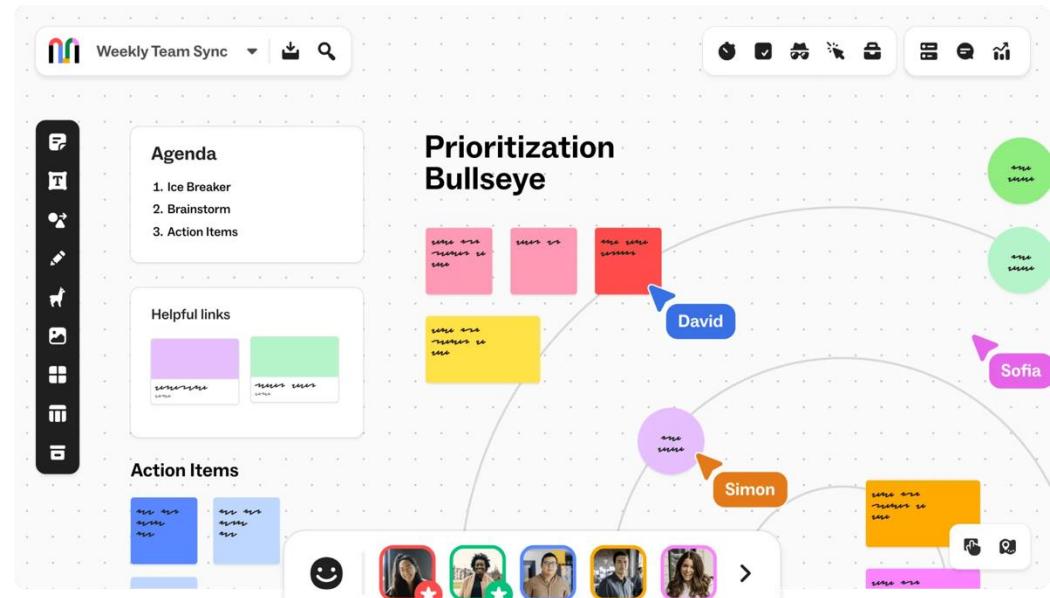


Mural

We will be using Mural for all the activities:

- Activity 1: <https://shorturl.at/rtEzv>
- Activity 2: <https://shorturl.at/1ahdl>
- Activity 3: <https://shorturl.at/SxCEd>

Password: forecast
(No need to create an account)





Code of Conduct

- **Respectful Communication:** Communicate with others in a professional and considerate manner. Be mindful of diverse perspectives and experiences. Avoid interrupting others and listen actively.
- **Inclusive Language:** Use inclusive language that avoids any discriminatory or offensive remarks. Be mindful of gender, race, ethnicity, religion, sexual orientation, and other personal attributes.
- **Active Participation:** Engage actively in discussions and activities. Share your insights and perspectives while being mindful of others' contributions.
- **Professional Conduct:** Maintain a professional demeanour throughout the workshop, including during breaks and social events.
- **Mobile Devices:** Minimize distractions by silencing mobile phones or using them only during breaks, unless they are essential for workshop activities.





Introduction from the SPHERE-PPL Team

Spatial, Health & Environmental Research using
Probabilistic Programming Languages





Outcomes of the Day

- This full-day event will bring together experts in a range of fields from industry, academia, and government to discuss cutting-edge research and explore collaborative opportunities within environmental science.
- Meeting participants will:
 1. Network with policy specialists and data scientists to discuss issues through a common language
 2. Identify forecasting challenges that the SPHERE-PPL Community will undertake and contribute to the design and outcomes of these endeavours to maximise their impact.
 3. Prioritise the training and support provided by SPHERE-PPL to the community to expedite the development of analytical capabilities where they are most urgently required



Keynotes

Spatial, Health & Environmental Research using
Probabilistic Programming Languages





Keynotes



Julie Smith – ADAS



Dr Robin Freeman – ZSL





Defra Survey of Crop Pests and Diseases



Department
for Environment
Food & Rural Affairs



Key challenges for arable crop production in UK agriculture



- A growing population to feed!
- Indigenous invertebrate pests & diseases cause major yield losses
- Disease pressure fluctuates from year-to-year but pressure is difficult to predict
- Management is largely via fungicides, resistant varieties, good agronomy
 - Decline in fungicide efficacy and alarming resistance issues
 - Loss of fungicide actives/products due to regulation
 - Resistant varieties break quickly as pathogen populations evolve
 - Move towards regenerative agriculture can favor certain diseases
 - IPM practices often require more diverse rotations
- Changing weather patterns make the season unpredictable
- Reduction in cropping area as land is placed into environmental schemes
- Increased public scrutiny; carbon footprint, nitrogen and pesticide use
- Requirement to “produce more, with less”

What is the Survey of Crop Pests & Diseases?



- Government funded annual survey, running for approx. 55 years
- Covers England and Wales
- Focuses on winter wheat and winter oilseed rape crops
- Monitors endemic diseases and invertebrate pests
- Collects accompanying data on agronomic practices
- Produces longitudinal, spatially resolved, consistent datasets



Llywodraeth Cymru
Welsh Government



UK FLOUR
MILLERS

Why is the survey important?

Delivers pest and disease information essential to establishing consensus across key stakeholder groups

Farmers and advisers



Industry



Researchers



Policy makers



Enabling farmers and advisers



Septoria leaf blotch (*Zymoseptoria tritici*)



Healthy crop



Healthy and diseased plots in a field trial, Herefordshire, June 2019

Supporting industry



Clubroot infested fields in Shropshire, 2016

Supplying research



- Survey data sets and pathogen resources recently made available
- Pathogen isolates provided for:
 - Resistance monitoring studies
 - Plant breeder screening trials
 - Agrochemical company product development trials
 - PhD studentships
- Data sets provided for:
 - Developing disease risk forecasting models & decision support tools
 - Regional risk maps for advisory services
 - Epidemiology studies
 - Scenario modelling of climate change impacts
 - Evaluation of IPM strategies and agronomy interventions



Defra (and wider) policy relevance



- Plant Health & Biosecurity
 - UK Plant Biosecurity Strategy (2023–2028)
 - Plant Health Research and Development Plan (2023–2028)
 - UK International Action Plan for Plant Health
- Pesticide regulation and IPM
 - UK Pesticides National Action Plan (NAP) 2025
 - Catchment Sensitive Farming (CSF)
 - Environmental Improvement Plan
 - UK Food Security Strategy, assimilated Regulation (EC) No 1107/2009
 - Plant Protection Products (Sustainable Use) Regulations 2012

Defra (and wider) policy relevance



- Food security & sustainable farming
 - Environmental Improvement Plan (2025)
 - Sustainable Farming Incentive (SFI) & Environmental Land Management Schemes (ELMs)
 - UK Food Security and Supply Resilience Strategy
- Climate adaption
 - UK Climate Change Framework (including Climate Change Act)
 - National Adaptation Programme
- Defra Open Data Strategy and Evidence Action plans
- R&D strategy teams
- Genetic Improvement Networks
- Defra Science Strategy
- Crop improvement networks & AHDB

Brief methodology

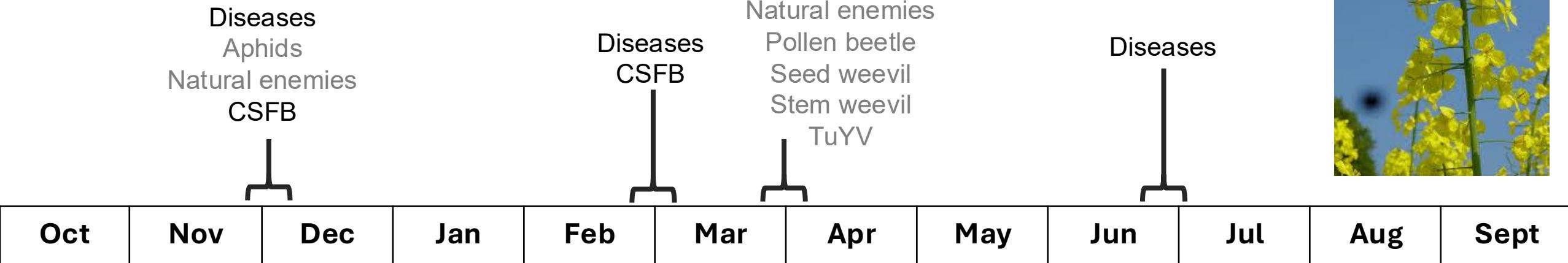


- 250-300 wheat fields & 85-100 oilseed rape fields surveyed
- Crops sampled at defined physiological growth stages
- 25 plants assessed from a traverse across the field
- All diseases assessed, by individual plant part

- Data reported as:
 - **Crop incidence** – the proportion of crops affected by a disease
e.g., [septoria was found in 90% of surveyed crops](#)
 - **Plant incidence** – the proportion of affected plants within a crop
e.g., [52% of plants within the crop had septoria](#)
 - **Severity** – the proportion of plant part affected by disease
e.g., [the flag leaf had 10% septoria](#)



What data are available?



Agronomic information to accompany field observations



- Field location (precise location is never disclosed)
- Area of field
- Variety & sowing date
- Previous cropping (4 years)
- Handling of previous crop debris
- Field cultivation techniques
- Seed origin (farm saved or certified)
- All pre and post emergence pesticide inputs:
 - Product
 - Dose
 - Application date and/or crop growth stage



How do I access the data?



The screenshot shows the homepage of the Pest & Disease Survey website. At the top, there is a navigation bar with links for Home, About the survey, Explore the data, News, Reports, and Contact us. A dropdown menu under 'Explore the data' is open, showing options like 'The interactive platform', 'What data are available?', and 'FAQs'. The main content area features a large photograph of a red tractor spraying a field with a sprayer unit attached. The website's logo, 'PEST & DISEASE SURVEY', is prominently displayed in the center, flanked by two circular icons: one with three stylized wheat ears and another with three flowers.

www.pestanddiseasesurvey.co.uk

Interactive platform

Home About the survey Explore the data News Reports Contact us



PEST & DISEASE S U R V E Y



Defra Survey of Crop Pests & Diseases - Data Explorer

Welcome to the Defra Survey of Crop Pest and Diseases data explorer.

We have created a set of pages to allow you to explore the crop incidence (percentage of fields affected), plant incidence (percentage of plants in a field affected) and severity (percentage of the plant part affected) for surveyed diseases of oilseed rape and winter wheat.

The data have been broken down by the time of sampling, with three sampling periods for oilseed rape (autumn, spring & summer) and one for winter wheat (summer). Within each data visual you will be able to see the time series for the whole UK or individual regions and also a breakdown of the disease incidence or severity by the plant part(s) sampled.

Please complete our [Feedback Form](#) to help us improve the platform.

Wheat (Summer data)

Wheat Green Leaf Area

Variety Information

OSR (Autumn data)

OSR (Spring data)

OSR (Summer data)

**OSR (Cabbage Stem
Flea Beetle)**



Interactive platform: wheat (1970 – present)



Home About the survey Explore the data News Reports Contact us

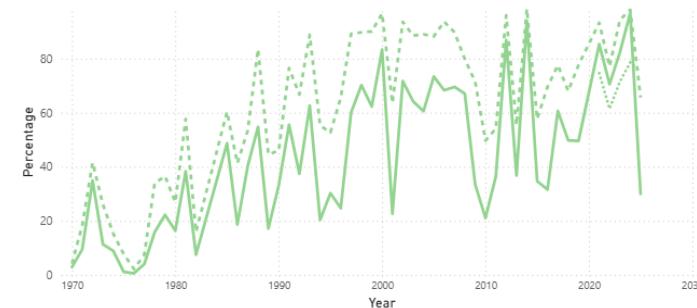
[Return to Start Page](#)

Select the region



Multiple Regions - Septoria leaf blotch Crop Incidence

Plant Part Affected — Leaf 1 — Leaf 2 — Leaf 3



Multiple Regions - Septoria leaf blotch Crop Incidence

Year East East Midlands North East North West South East So

Year	East	East Midlands	North East	North West	South East	So
2025	50.25	58.00	53.33	66.67	55.21	
2024	90.98	93.01	100.00	100.00	82.59	
2023	87.89	87.19	96.15	100.00	78.28	
2022	69.87	68.43	90.83	33.33	65.50	
2021	84.38	85.93	94.44	55.56	89.74	
2019	62.72	64.81	59.09	75.00	58.97	
2018	68.19	51.16	10.00	0.00	68.52	
2017	61.22	65.93	45.00	50.00	79.31	
2016	35.42	49.40	25.00	83.33	63.89	
2015	45.13	32.64	27.27	60.71	51.67	
2014	95.57	92.79	100.00	100.00	98.39	
2013	31.77	43.75	63.64	42.86	63.28	
2012	61.10	55.84	51.15	100.00	55.84	

[Clear filter selections](#)

Sowing

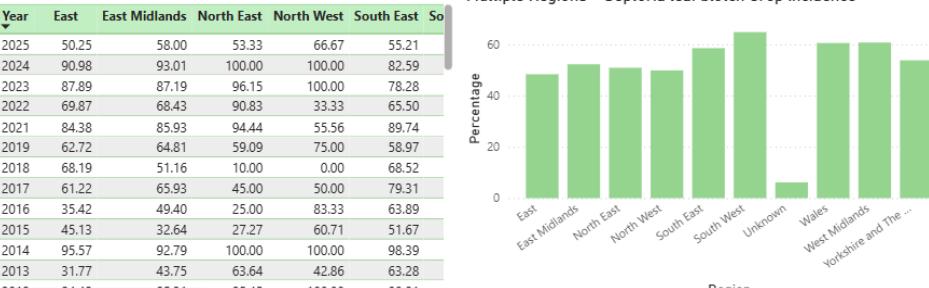
All

Variety

All

Cultivation

All



Home About the survey Explore the data News Reports Contact us

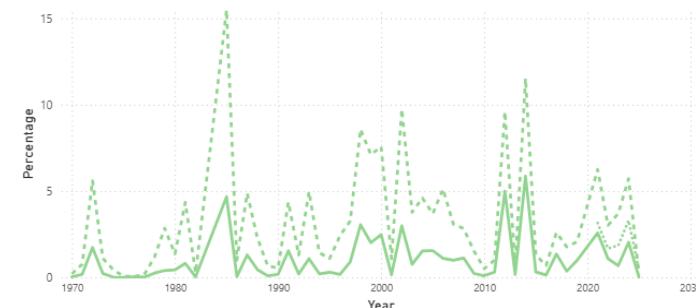
[Return to Start Page](#)

Select the region



Multiple Regions - Septoria leaf blotch Severity

Plant Part Affected — Leaf 1 — Leaf 2 — Leaf 3



Multiple Regions - Septoria leaf blotch Severity

Year

East

East Midlands

North East

North West

South East

So

Year	East	East Midlands	North East	North West	South East	So
2025	0.08	0.18	0.04	0.27	0.45	
2024	3.61	2.43	4.74	5.19	3.63	
2023	2.31	1.20	2.97	2.55	1.88	
2022	1.31	1.67	0.98	2.92	1.85	
2021	2.95	3.69	5.05	4.61	5.42	
2019	0.96	1.13	1.42	3.54	1.84	
2018	0.83	0.61	0.01	0.00	1.93	
2017	0.60	1.37	0.19	0.59	1.57	
2016	0.19	0.42	0.08	0.94	0.61	
2015	0.34	0.28	0.13	1.27	1.21	
2014	4.61	4.40	13.05	20.73	6.42	
2013	0.08	0.38	0.26	0.85	0.65	
2012	0.50	7.20	0.70	0.70	0.70	

[Clear filter selections](#)

Sowing

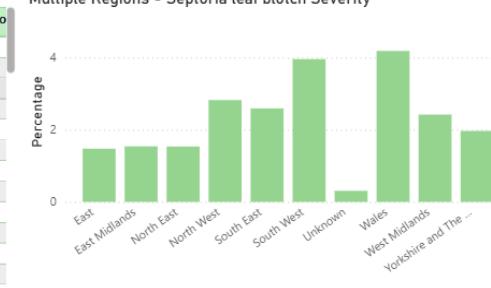
All

Variety

All

Cultivation

All



Download the data

Home About the survey Explore the data News Reports Contact us

The interactive platform

What data are available?

FAQs

Underpinning Data

The data underpinning the platform visualisations

cel spreadsheet files:

National Disease Data:

- [!\[\]\(1d55bd2ae775b7328eafafa27e9af887_img.jpg\) National Mean Time Series Wheat October 2025](#)
- [!\[\]\(a5ca2e357fec4c6a0b8dfae2bb689e5f_img.jpg\) National Mean Time Series OSR October 2025 v3](#)

Regional Disease Data:

- [!\[\]\(254527ec491c02ec03e2febd5aa342ea_img.jpg\) Regional Mean Time Series Wheat October 2025](#)
- [!\[\]\(47b8cc79b05c7855d46af8a2b26f2df4_img.jpg\) Regional Mean Time Series OSR October 2025 v3](#)

Cabbage Stem Flea Beetle Data:

- [!\[\]\(fb6c7ee66c536ac653301e79e63e3447_img.jpg\) National and Regional CSFB Time Series April 2025](#)

Our analysis of the data so far

- **What determines disease severity in commercial fields?**
 - Cultivar resistance, fungicide programme, sowing date, weather, previous crop, sampling data/sampling growth stage, seed origin
- **Cultivar resistance rating**
 - Is resistance rating correlated with disease severity in the field?
 - Do growers select cultivars on basis of resistance rating?
 - Do growers adjust their fungicide programme according to the resistance rating?
- **Fungicide use**
 - Do growers adjust treatment programmes when fungicide resistance develops?

Caveats (from Defra)



- Only the mean national and/or regional data that are publicly available on the website can be used
- Requests for higher resolution data will not be approved for this competition
- Contestants recognise that the data are being used in hypothetical scenarios to test a model(s) for an exercise which does not necessarily represent real life
- Any planned outputs such as publications or articles must be authorised by Defra prior to publication
- Defra must be acknowledged in outputs and KE activities

Thank you

pestanddiseasesurvey@adas.co.uk

www.pestanddiseasesurvey.co.uk

@DefraSurvey

Coffee Break

Refreshments are around the corner in the kitchen areas



Forecasting Severe System Pressure in the NHS

Spatial, Health & Environmental Research using
Probabilistic Programming Languages



Introduction

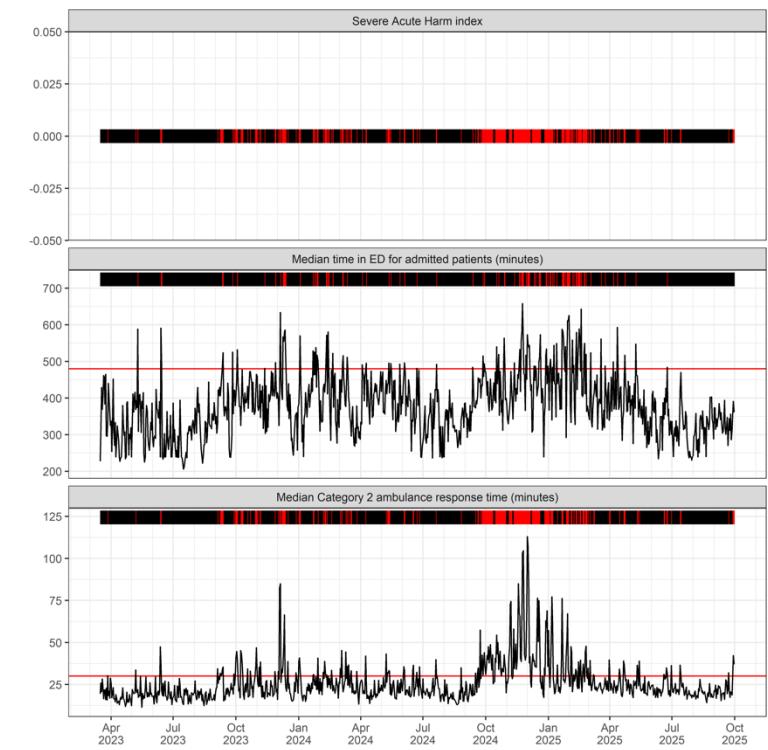
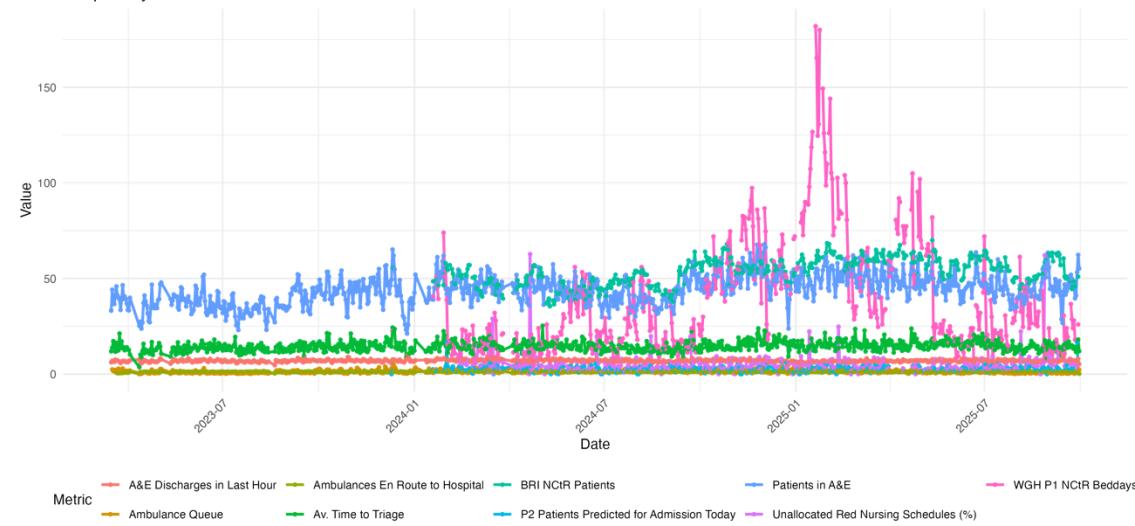
- Hospitals, EDs, and ambulances face unpredictable surges that risk patient care
- Predicting severe system pressure enables proactive staffing, resource allocation, and patient flow management



Data

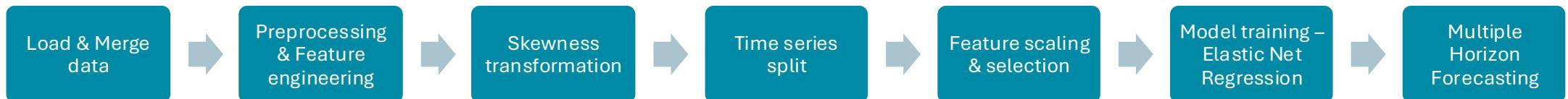
- Predictors:
 - 157 variables
 - Hospital, ambulance, ED, primary care
- Outcome variable: Severe System Pressure
 - Binary variable
 - ED time + cat 2 ambulance response time
- 2.5 years of data (Mar 2023 – Sep 2025)
 - 15 min – 24 hr temporal resolution

Hospital System Metrics Over Time



Contest

- Goal: build an AI forecasting pipeline to predict severe system pressure at 1-10 day horizons
 - Prize 1: use provided feature dataset
 - Prize 2: can include additional data
- Repo and data now public via SPHERE Github
 - Watch this space



Activity 1 - Identifying Key Environmental Challenges



How its going to work!

- **Stage 1 - Break-out Discussions (45 minutes)**

- Split into teams
- 45 minutes to talk about key environmental challenges that relate to modelling & forecasting
- Add them to the Mural Board
- Don't worry about finding solutions, we will do that in this afternoon's session

- **Stage 2 - Group Feedback & Contest Priorities Vote (45 minutes)**

- Each team will have 2 minutes to present what they think is the biggest challenge they discussed
- These will form the basis of our forecast contest discussions later!



Groups

GROUP 1	
Alex Rabeau	Academia / Research
Cathal Mills	Academia / Research
Robert Barber	Academia / Research
Aoibheann Brady	Industry / Private Sector
Benjamin Payne	Government / Policy
Kirsten Miller	Government / Policy
Jack Denton	NGO / Non-profit

GROUP 2	
Will Pearse	Academia / Research
Daniella Rabaiotti	Industry / Private Sector
James Bell	Academia / Research
Santiago Martinez Balvanera	Academia / Research
Maisie Vollans	Government / Policy
Julie Smith	Government / Policy
Robin Freeman	NGO / Non-profit

GROUP 3	
Nathan Clark	Academia / Research
Kirsty Hassall	Academia / Research
Andrew Mead	Academia / Research
Elizaveta Semenova	Academia / Research
Avishek Dangol	Industry / Private Sector
Yogesh K Gupta	Government / Policy
Nick Howlett	Healthcare

GROUP 4	
Lucy Somekh	Academia / Research
Phil Wilkes	Academia / Research
Rhys Preston-Allen	Academia / Research
Benjamin Howes	Industry / Private Sector
Kelly Harrison	Industry / Private Sector
Richard Wood	Healthcare
Zhiying Tang	Academia / Research

GROUP 5	
Olivia Morris	Academia / Research
Rushanka Amrutkar	Government / Policy
Daniel Villar	Academia / Research
Sean Chen	Academia / Research
Graham Prescott	Industry / Private Sector
Daveron Smith	Government / Policy
Michael Tso	Academia / Research

GROUP 6	
Ettie Unwin	Academia / Research
Hamid	Academia / Research
Marta Koch	Academia / Research
Dave Skirvin	Industry / Private Sector
Joe Forster	Government / Policy
Eric Daub	Government / Policy
Gareth Thomas	NGO / Non-profit

GROUP 7	
Makkunda Sharma	Academia / Research
Ciara Judge	Academia / Research
Ammar Alvi	Academia / Research
ginni goldin	Industry / Private Sector
Conor Meenan	Government / Policy
Huw James	
Zbigniew Kolendowicz	Private/Research



Activity 1 – Group Feedback



Lunch Break

Refreshments and food are around the corner in the kitchen areas!



Welcome Back!

Timings	Activity	Description
13:50-14:00	Lyme Disease Contest Prize Giving	
14:00-14:10	Presentation - Will Pearse	Building a Forecasting Contest
14:10-14:45	Break-Out Design	Activity 2 - Groups design forecasting contests
14:45-15:15	Break-Out Feedback	Group feedback and discussion of contest priorities
15:15-15:40	Coffee Break	
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16:35-16:55	Break-Out Feedback	Creating a community priority list
16:55-17:00	Wrap-Up	



Lyme Disease Contest Prize Giving

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Probabilistic Programming Languages



Activity 2 – Designing a Forecasting Contest





How its going to work!

- **Stage 1 – Building a Forecasting Contest (10 minutes)**
 - Quick presentation from the SPHERE-PPL team on how the forecasting contests are going to work mechanically and what makes a good contest
- **Stage 2 – Break-Out Discussions (40 minutes)**
 - Split into teams aligned to the identified key challenges.
 - Using the Contest grids on the Mural Board, start designing a forecasting contest
- **Stage 3 - Group Feedback (40 minutes)**
 - Each team will give an overview of their proposed contest
 - Indicative vote on what would provide greatest impact





Building a Forecasting Contest

From Questions to Insights

Dr Will Pearse

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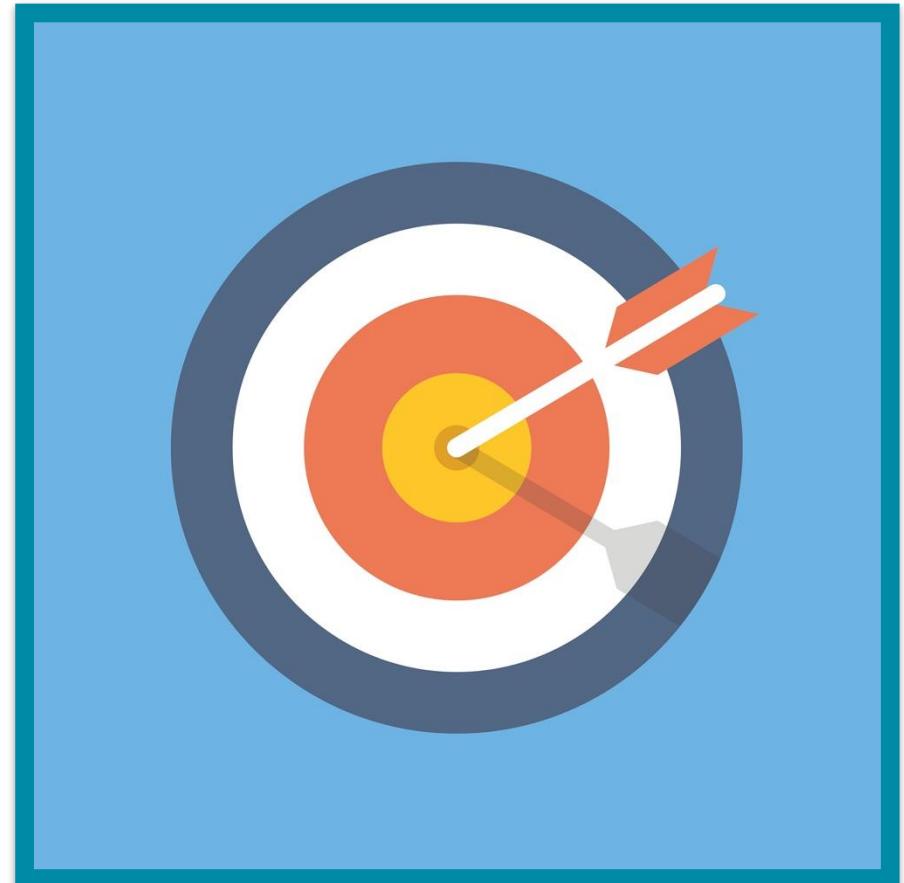
Why do a Forecasting Contest?

Grand Vision

- An open-source and globally-accessible competition to find innovative and accurate ways of predicting something.
- A conduit for connecting stakeholders with analytical capability.

Smaller Scale

- Find answers to the challenges we talked about earlier!
- Put resources and insights into your hands.



SPHERE-PPL Framework

A [Github Repo](#), that can be cloned, edited and then collated by contest organisers, using our [Forecasting AggregatoR App \(FARA\)](#).

FARA can:

- Find all contest submissions automatically
- Check entries for errors and issues
- Be customised for any GitHub-based contest
- Condense all results and synthesise insights

FARA - Forecast AggregatoR App

Welcome to FARA

FARA (Forecast AggregatoR App) is a tool that finds all forked repos taking part in forecasting competitions and checks each submission before cloning the repos locally.

Instructions

1. Select the owner of the competition
2. Select the competition repo
3. Enter the name of the file to check (this is usually a forecast in a csv format)
4. Enter the destination folder where the repos will be cloned (this will autofill with the FoRKast app directory)
5. Click the 'Run FARA' button to start the process

Outputs

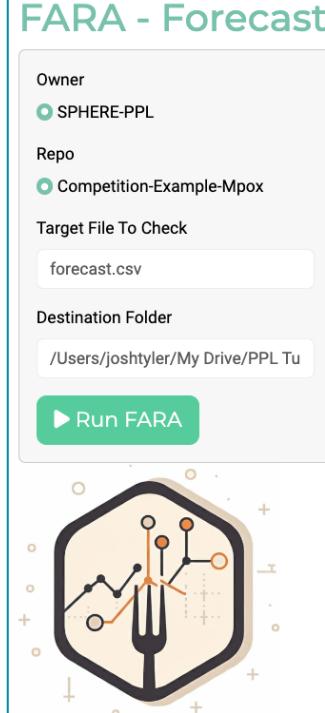
All submissions that pass the checks will be cloned to the destination folder (each within their own folder named `owner_repo`)

If there are any errors, the repos with issues will be named in the folder called 'Errors'. Each repo will have a text file with the errors listed.

If the cloned repo folders already exist within the destination folder, FARA will not overwrite them. To clone any updated repos, please delete the older versions

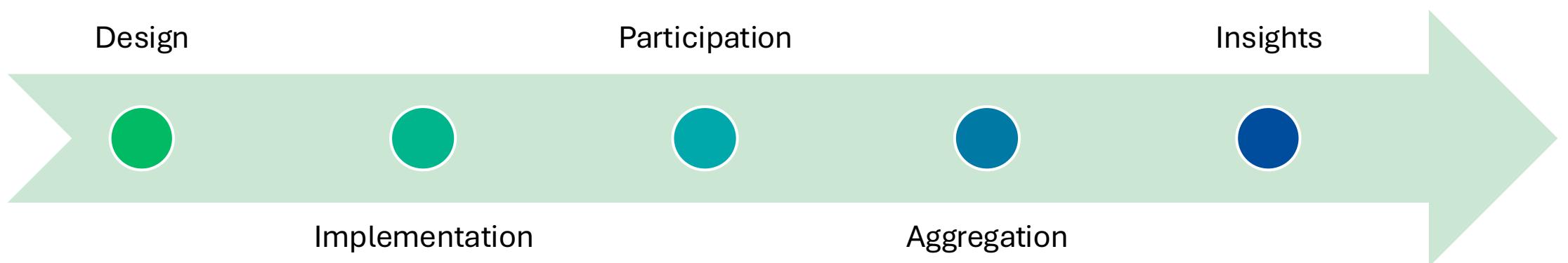
Customising FARA

This app can be edited to find forks of any repo and check any file and the checks can also be customised to suit the competition requirements. Head to the [SPHERE-PPL Forecast-AggregatoR](#) to find the code and make changes. This app can also be used in conjunction with our contest template repo to run your own forecasting contests: [SPHERE-PPL Forecasting Contest Template](#).





Journey of a Contest



Considerations

Design

What are the Key Challenges we want to solve?
Who will benefit from the forecasts?



Implementation

What datasets can we use openly?
Are there any specific strategies or tools that we want to see?



Participation

Can we engage with a diverse set of teams?
Do they have enough time?
How can we best support them?



Aggregation

How should we aggregate all the entries?
Do we want to build a new model based on the findings of the contest?

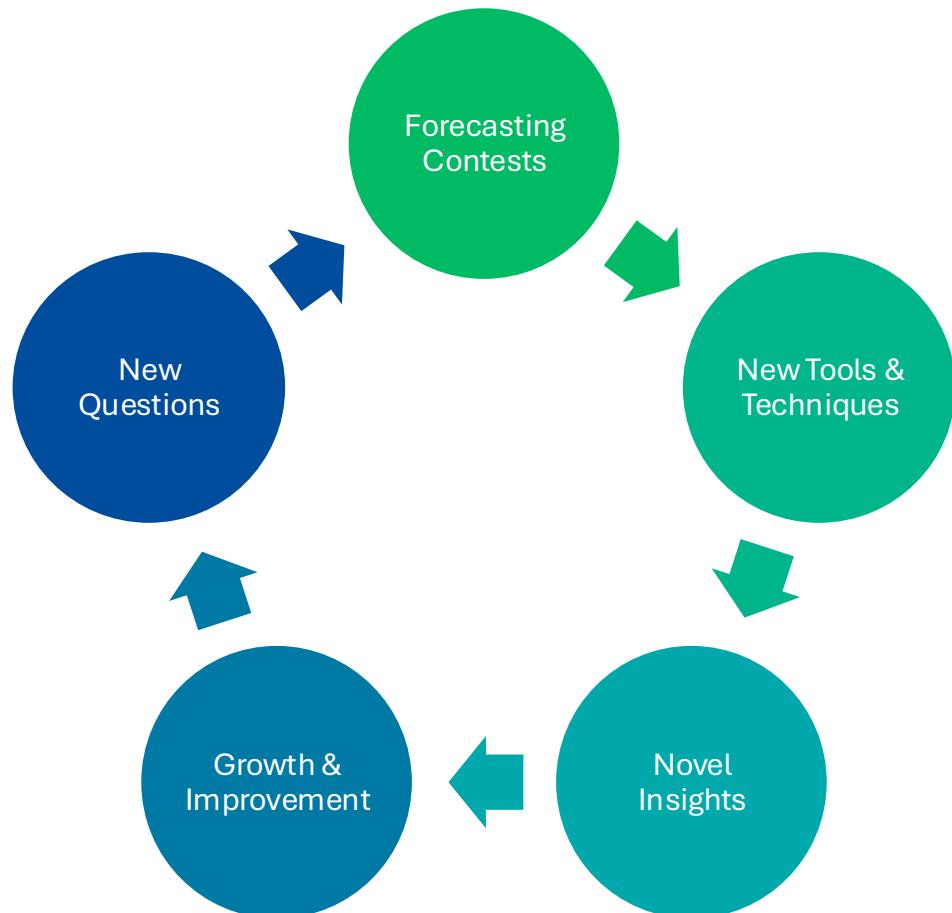


Insights

What format would create the most impact?
How can we disseminate the results and maximise usefulness?



Maximising Value to Stakeholders



Example - CVDs

Key Challenge	Future burden of Cardiovascular Disease (CVD)
Exam Question	Forecast the number of new cases of CVD in the UK for each year from 2024 to 2034, stratified by age group and sex.
Usable Data	<ul style="list-style-type: none"> PHE Data (Trends in CVD mortality, morbidity, and risk factors) ONS Data (population projections, mortality rate, socioeconomic factors)
Output Format	<ul style="list-style-type: none"> Table of forecasted numbers Summary report Deployable app
Other Information	Include coronary heart disease, stroke, and heart failure

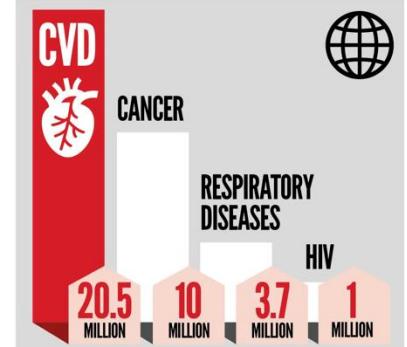


CARDIOVASCULAR DISEASE THE WORLD'S NUMBER 1 KILLER

Cardiovascular diseases are a group of disorders of the heart and blood vessels, commonly referred to as **heart disease** and **stroke**.



GLOBAL CAUSES OF DEATH



RISK FACTORS FOR CVD



Sources: World Health Organization;
IHME, Global Burden of Disease

info@worldheart.org
www.worldheart.org

f worldheartfederation
t worldheartfed
g worldheartfederation



How its going to work!

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Key Environmental Challenges



Activity 2 – Group Feedback



Coffee Break

Refreshments are around the corner in the kitchen areas



Keynotes

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Probabilistic Programming Languages





Keynotes

**The
Alan Turing
Institute**

Dr Eric Daub – *The Alan Turing Institute*

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Activity 3 – Building a Community





How its going to work!

- **Stage 1 – What can SPHERE-PPL do for you? (10 minutes)**
 - Quick presentation from the SPHERE-PPL team on what the future holds
- **Stage 2 – Brainstorming requests for workshops, training and support (20 minutes)**
 - Split into groups and make a list of different ideas that would help you make progress in your area (added on the Mural Board)
 - Include as many details as possible!
- **Stage 3 – Creating a community priority list (30 minutes)**
 - Each team will give an overview of their requests
 - Discussion around how the SPHERE-PPL community can best facilitate and maximise value



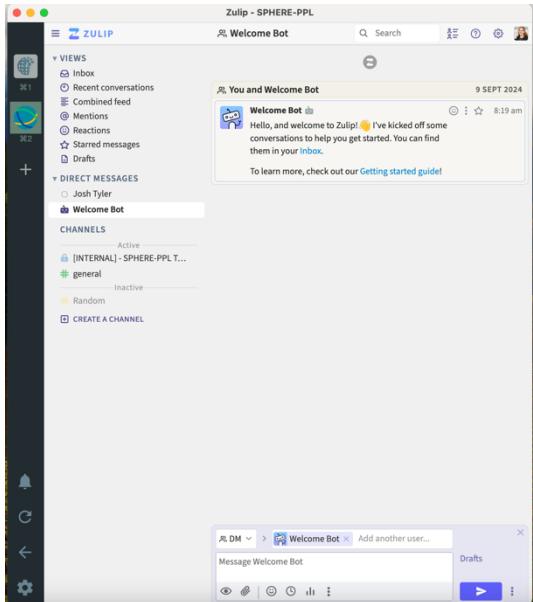


What can SPHERE-PPL do for you?

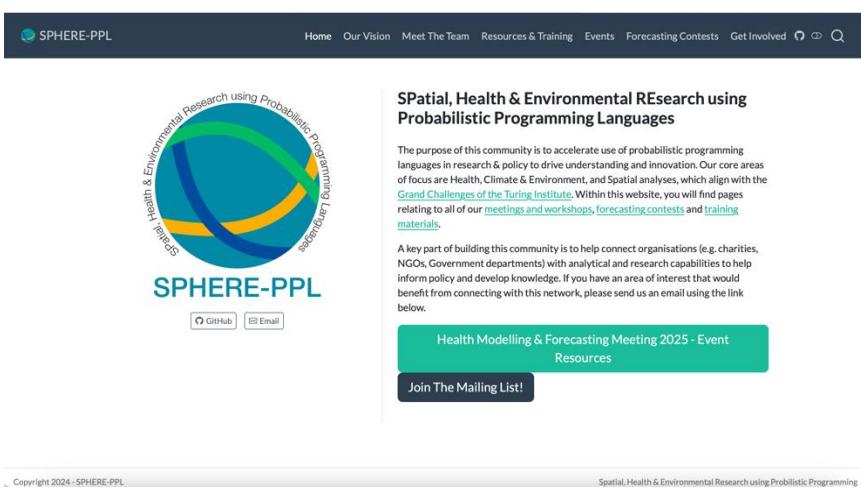
- The network's primary goal is to connect data-scientists, researchers and policy-makers, to enable high-quality modelling and data-driven decision-making.
- The SPHERE-PPL project has funding to facilitate workshops, training and targeted support on both fundamental modelling & probabilistic programming, alongside events and sessions like today, working directly with stakeholders.



What we've done so far



A screenshot of the Zulip messaging platform. The sidebar shows channels like 'general' and 'Drafts'. A message from 'Welcome Bot' says: 'Hello, and welcome to Zulip! I've kicked off some conversations to help you get started. You can find them in your inbox.' Below the message is a link to the 'Getting started guide'.



The homepage of the SPHERE-PPL website. It features a circular logo with a stylized 'S' and text about spatial, health, and environmental research. A banner at the top says 'SPATIAL, HEALTH & ENVIRONMENTAL RESEARCH using PROBABILISTIC PROGRAMMING LANGUAGES'. Below the banner, there's a section about the purpose of the community, mentioning probabilistic programming languages for research and policy. A call-to-action button says 'Join The Mailing List!'.



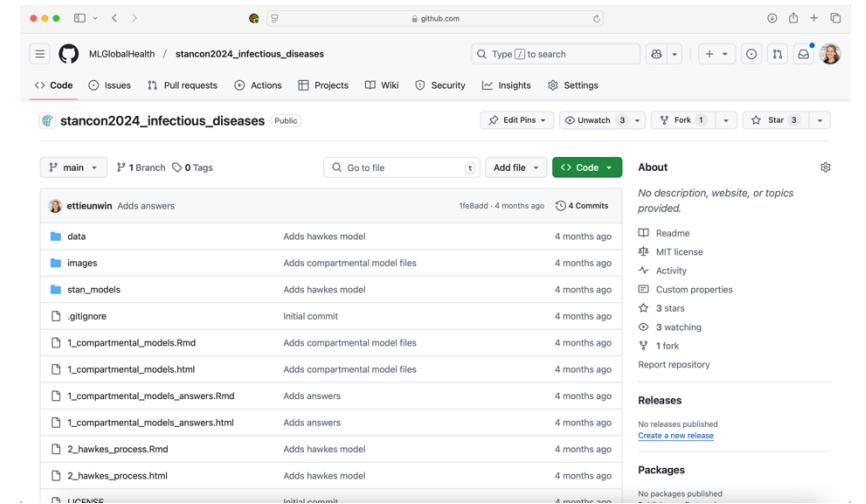
StanCon 2024
Conference on Stan programming and Bayesian Modeling
Oxford University, UK. September 2024



Symposium for Bayesian Modelling
Jan 22 2024



Spatial, Health & Environmental Research using Probabilistic Programming Languages



A screenshot of a GitHub repository named 'stancon2024_infectious_diseases'. The repository has 1 branch, 0 tags, and 4 commits by 'ettieunwin'. The commits are listed as follows:

Commit	Description	Date
data	Adds hawkes model	4 months ago
images	Adds compartmental model files	4 months ago
stan_models	Adds hawkes model	4 months ago
.gitignore	Initial commit	4 months ago
1_compartimental_models.Rmd	Adds compartmental model files	4 months ago
1_compartimental_models.html	Adds compartmental model files	4 months ago
1_compartimental_models_answers.Rmd	Adds answers	4 months ago
1_compartimental_models_answers.html	Adds answers	4 months ago
2_hawkes_process.Rmd	Adds hawkes model	4 months ago
2_hawkes_process.html	Adds hawkes model	4 months ago
RELEASE	Initial commit	4 months ago



How its going to work!

- **Stage 1 – What can SPHERE-PPL do for you? (10 minutes)**
 - Quick presentation from the SPHERE-PPL team on what the future holds
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Groups

GROUP 1	
Alex Rabeau	Academia / Research
Kirsty Hassall	Academia / Research
Phil Wilkes	Academia / Research
Hamid	Academia / Research
Avishek Dangol	Industry / Private Sector
Daniella Rabaiotti	Industry / Private Sector
Rushanka Amrutkar	Government / Policy

GROUP 2	
Will Pearse	Academia / Research
Cathal Mills	Academia / Research
Rhys Preston-Allen	Academia / Research
Julie Smith	Government / Policy
Yogesh K Gupta	Government / Policy
Zbigniew Kolendowicz	Private/Research
Graham Prescott	Industry / Private Sector

GROUP 3	
Nathan Clark	Academia / Research
Robert Barber	Academia / Research
Santiago Martinez Balvanera	Academia / Research
Sean Chen	Academia / Research
Dave Skirvin	Industry / Private Sector
Benjamin Howes	Industry / Private Sector
Robin Freeman	NGO / Non-profit

GROUP 4	
Lucy Somekh	Academia / Research
Ciara Judge	Academia / Research
James Bell	Academia / Research
Aoibheann Brady	Industry / Private Sector
Kelly Harrison	Industry / Private Sector
Maisie Vollans	Government / Policy
Joe Forster	Government / Policy

GROUP 5	
Olivia Morris	Academia / Research
Daniel Villar	Academia / Research
Marta Koch	Academia / Research
Daveron Smith	Government / Policy
Eric Daub	Government / Policy
Benjamin Payne	Government / Policy
Richard Wood	Healthcare

GROUP 6	
Ettie Unwin	Academia / Research
Ammar Alvi	Academia / Research
Elizaveta Semenova	Academia / Research
Kirsten Miller	Government / Policy
Nick Howlett	Healthcare
Gareth Thomas	NGO / Non-profit
Zhiying Tang	Academia / Research

GROUP 7	
Makkunda Sharma	Academia / Research
Michael Tso	Academia / Research
Andrew Mead	Academia / Research
ginni goldin	Industry / Private Sector
Jack Denton	NGO / Non-profit
Conor Meenan	Government / Policy
Huw James	Industry / Private Sector



Activity 3 – Priority List



Wrap-Up

- We've reached the end of the day!
- Please complete the Feedback Survey!
- We're now heading to the Queen's Head pub, 66 Acton St!



Thank-You!

For more information, please visit www.sphere-ppl.org or email
the team at info@sphere-ppl.org.

