

## A Brief Introduction

The revised structure for SEPnet Outreach & Public Engagement (PE) has been developed to recognise and encourage the variety of activities across SEPnet and encourage departments and officers to develop their own Outreach & PE strategies.

## The Structure

The revised structure is made up of two core **programmes** and numerous additional **projects**. There's a programme for School Outreach and another for Public Engagement based on research. Each programme has their own Aims which in turn work towards achieving the SEPnet Outreach & PE Vision.

### *The Vision*

***High profile universities engaging the wider community with physics and inspiring future physicists.***

Projects are smaller in scale and not carried out by all the officers. These projects are either new ideas (i.e. pilot projects) or activities which not all departments prioritise and therefore aren't considered core activities. Some projects are research projects which could lead to a pilot project next year.

Each SEPnet Outreach Officer will consult with their line manager, HoD and the SEPnet Director of Outreach to determine which projects they would like to work on that will benefit the department's own Outreach and Public Engagement Strategy and the professional development needs of the Officer themselves.

The combination of the Core Programmes and selected Projects will lead to each Officer having an individualised task list for the academic year.

## Core Programmes

The core programmes contain activities which have greater impact when carried out across the entire network. If successful, pilot projects could end up being embedded within the core programmes.

Based on a standard Outreach Officer's allocation of 2.5 days a week to SEPnet priorities, the core programme take 1.5 days. Each department can choose to prioritise one core programme over the other (leading to a 1.0 and 0.5 day split) or give both programmes the same priority (leading to 0.75 days each).

### Core Programme 1: Schools Outreach

**Aim:** *The core SEPnet Outreach programme delivers activities which communicate the following messages across the region, with particular focus on students in Key Stage 3 and 4:*

1. *Anyone can do physics.*
2. *Physics is exciting, relevant & important; it goes beyond the classroom.*
3. *Studying physics further broadens career possibilities.*

All SEPnet Outreach partners will offer the following workshops:

- Physics: What, Why, How? (KS3, Available September 2016).
- Revised KS4 Workshops (Available Easter 2017).
- WISE People Like Me Workshop.

Other activities included in the core SEPnet Outreach programme include all local activities aimed at schools from Year 7 to 11, such as:

- Any of the older GCSE Workshops Officer wish to keep.
- Astrodome Sessions / Masterclasses.
- Big Bang Fairs.
- Work Experience.
- Any on campus events involving schools.
- School Physicist of the Year.
- Accelerate / LightTAG / Cool Physics and other departmental specific shows.

This core programme will also look at how schools are selected at each department, working to make this process strategic instead of reactive. This will involve working with partners such as local WP teams, the IOP teacher networks and Ogden teacher fellows.

## Core Programme 2: Public Engagement with Research

**Aim:** *The SEPnet Outreach team will help cultivate a culture which embeds public engagement within physics research. The SEPnet public engagement program will train and support physicists to develop, run and evaluate impactful methods of engaging different audiences with their research.*

This programme uses the NCCPE's [definition](#) of PE as its basis. All activities based on research which are included in this core programme. There will be a few activities which fit under both programmes, but these are exceptions. Instead of focussing on delivery, this programme looks at building frameworks to enable physicists to carry out the delivery themselves. This includes:

- Public Engagement Courses (in partnership with GRADnet)
- The Public Engagement Awards
- Blog
- Mailing List
- Any events which embed SEPnet partners within their local community (Stargazing Live)
- Support for any PE project funded through SEPnet / STFC / IOP that fits under the definition of PE.

## Projects

Projects will be assigned to one of the core programmes. Each project will have a lead, in some cases this will be the SEPnet Director of Outreach, for other projects this will be one of the Officers. Projects will be mostly funded by central SEPnet funding or external funding.

Based on a standard Outreach Officer's allocation of 2.5 days a week to SEPnet priorities, projects will cover about 1 day. The total number of projects an Officer takes up depends on their experience, interests of the department and what skills they would like to develop as part of their professional development.

### Current Outreach Projects

| Outreach  |
|---|
| <b>Strengthening The Core</b>   |
| <p>Redevelop the existing GCSE Workshops content into a more relevant package of workshops. Develop new KS3 workshops, <i>Physics: What, Why, How?</i> These workshops are aimed at students with medium to high science capital and are based on recommendations from the ASPIRES report.</p> <p><b>Project Lead:</b> Director of Outreach<br/> <b>SEPnet Officers:</b> Kent, QMUL, RHUL, Sussex, Oxford<br/> <b>Potential Partners:</b> External Evaluator, Teachers, IOP Careers</p> |

| Outreach  |
|---|
| <b>Shattering Stereotypes</b>   |
| <p>There has been a lot of research into progression of girls in STEM subjects over the last decade. In recent years the research has been placed in the wider context of gender stereotyping in schools. This project will look at how Physics Outreach Officers can most effectively work on this problem.</p> <p>The project is based on latest research from WISE and the IOPs reports. Based on the success of the project it will be rolled out to more Officers next year.</p> <p><b>Project Lead:</b> Director of Outreach<br/> <b>SEPnet Officers:</b> RHUL, Portsmouth, Soton, Surrey<br/> <b>Potential Partners:</b> WISE, IOP, External Evaluator</p> |

### Current Public Engagement Projects

| Public Engagement  |
|--|
| <b>SEPnet Impact Group</b>   |
| <p>This project gives the Outreach Officer the opportunity to look at Impact beyond Public Engagement case studies and form part of any potential SEPnet Impact Group.</p> <p><b>SEPnet Officers:</b> RHUL, Portsmouth, Soton, Sussex, Open, Herts, Kent</p> |

### Public Engagement

#### Festivals

SEPnet Outreach has attended Bestival and Glastonbury within the last year. This project looks to continue SEPnet's presence at festivals across the region. This will include developing materials which would work in a festivals setting.

**Project Lead:** Portsmouth

**SEPnet Officers:** Kent

**Potential Partners:** Partner Universities

### Public Engagement

#### Lead / Consult in Department PE Project

Officers are encouraged to lead or consult in departmental public engagement projects that provide their researchers with opportunities to develop their public engagement skills and reach wider audiences. These projects will mostly be externally funded by organisations such as the IOP and STFC.

**Potential Partners:** IOP, STFC

## Current Outreach & Public Engagement Projects

### Outreach / Public Engagement

#### Research in Schools

Recent projects, such as CERN@School have involved getting schools to carry out their own research. Based on experiences of CERN@School and other similar projects, these officers will investigate how SEPnet can develop different frameworks for getting research into schools, driven by the physicists themselves. This could take the form of short-term school projects. This project is unique in that it straddles both programmes.

**Project Lead:** QMUL

**SEPnet Officers:** Kent

**Potential Partners:** IRIS, Ogden

## Upcoming Projects

### Outreach

#### Teacher Support

The officers involved in this project will investigate the demand for larger regional teacher support events and how to market events to teachers that need it the most.

**Project Lead:** TBD

**Possible SEPnet Officers:** St Mary's, Herts, RHUL, Sussex, Soton

**Potential Partners:** Science Centres, Education Departments, IOP Networks

Outreach

**Developing Primary (Research)**

Research has shown that earlier interventions (Key Stage 2 or earlier) could be more effective in keeping children's aspirations in science going beyond Key Stage 3, especially those with low science capital. There are many ways SEPnet could get involved, including developing resources, running activities or providing teacher support. This project will investigate how SEPnet could be most effective.

**Project Lead:** Reading

**SEPnet Officers:** Portsmouth, Herts

**Potential Partners:** Ogden, Science Centres

## Evaluation Reporting & Admin

Alongside the programme and projects, each officer will be asked to send it annual reports of SEPnet activities, alongside topical smaller reports and other data requests.

There will also be a greater emphasis on evaluating the SEPnet Outreach & Public Engagement programme as a whole. This will be coordinated by the SEPnet Director of Outreach, but will require some input from officers throughout the year.

| Evaluation  |
|---|
| <b>SEPnet wide Long-term Evaluation</b>   |
| There will be an additional project giving Officers an opportunity to help develop methods for evaluating SEPnet Outreach and Public Engagement across the region. This will also look at what data is collected and reported on, and see what is both needed and useful. |
| <b>Project Lead:</b> Director Of Outreach<br><b>SEPnet Officers:</b> RHUL, Soton<br><b>Potential Partners:</b> NCCPE, IOE, IOP  |

## **Benefits of new structure**

### **To Departments**

This new structure enables individual departments to consider what their priorities are for their outreach and public engagement programmes. It also gives departments more flexibility to focus on activities beyond the traditional SEPnet outreach within schools.

### **To Outreach Officers**

This structure will help officers consider their workload regarding SEPnet commitments. Most SEPnet officers are already overworked. This structure will help them figure out what they should prioritise. It is also an opportunity for officers to develop new skills and learn from other officers across the network and external partners.

### **To SEPnet**

Physics Outreach to schools has always benefited from the sum being greater than its parts, and this has been the emphasis of the previous SEPnet Outreach programmes. This structure gives some flexibility and allows departments to diversify the different types of activities being delivered across the network, based on their strengths.