

New Investment in Physics Teaching and Research in South East England

The [South East Physics network](#) (SEPnet) and [HEFCE](#) are delighted to announce their plans to invest £13.1 million pounds to sustain physics undergraduate and postgraduate teaching provision, and world class research facilities, staff and doctoral training over the 5 years up to 2018. HEFCE will provide £2.75 million to maintain and expand the network, to establish a dedicated regional graduate training programme for physics postgraduate students and address physics specific issues of student participation and diversity. On top of the HEFCE contribution, each SEPnet partner will support and fund programmes of Outreach, Employability and Research.

The South East Physics Network (SEPnet) was formed after receiving a £12.5 million grant from HEFCE in 2008 as a network encompassing [Rutherford Appleton Laboratory](#) and six Physics departments in South East England at the Universities of [Kent](#), [Queen Mary University of London](#), [Royal Holloway University of London](#), [Southampton](#), [Surrey](#) and [Sussex](#). The [Science and Technology Facilities Council](#) and [Rutherford Appleton Laboratory](#) provided additional funds and resources for collaborations in particle physics (the [NExT institute](#)) and astrophysics (the [LOFAR](#) experiment). The University of [Portsmouth](#) joined in 2010. [The Open University](#) and the University of [Hertfordshire](#) will join the network effective the 1st August 2013.

SEPnet Phase One has been tremendously successful for the partners in SEPnet and for physics in the region. The Outreach programme, regarded as an exemplar for collaborative outreach, uses the combined knowledge and resources of each partner to provide greater impact and reach and demonstrates that the whole is greater than the sum of its parts. It has succeeded in effectively exploiting the growing national interest in physics through its wide range of public engagement and schools activities. There has been a substantial increase in applications and intake for physics undergraduate courses and undergraduate numbers are now 90% higher in the SEPnet physics departments compared with 2007 and applications up approximately 115% - well above national trends.

Announcing the investment, SEPnet's Independent Chair Professor Sir William Wakeham said "This is a major success for physics both in the region and nationally. HEFCE's contribution via SEPnet has enabled the partners in the consortium to grow and develop their physics departments for the long term. Before SEPnet, physics departments had falling student numbers and lacked research diversity. Now they are robust and sustainable and the SEPnet consortium is an exemplar of collaboration in Higher Education."

David Sweeney, Director of Research, Innovation and Skills, HEFCE said: "We are delighted to see the fruits of a very successful intervention to support what was once a vulnerable subject. HEFCE are pleased to provide funding for a new phase, particularly to address new challenges in the field of postgraduate training and widening participation. The expansion to include new physics departments is a testament to the success of the network and can only act to strengthen and diversify the collaboration."

Sir Peter Knight, President of the [Institute of Physics](#) (IOP), expressed strong support for the government's continued investments in the sciences generally and in physics specifically. "SEPnet has been an undoubted success in sustaining physics in the South East region and has strongly participated in contributing to its beneficial effects nationally. It is an exemplar of collaborative best practice in outreach, employability and research and we now look forward to collaborating in the critical areas of graduate training, public engagement and diversity."

The specific programmes already being developed by the network include:

1. a regional Graduate Network built on the strength of current SEPnet research collaborations and graduate training whose primary objectives will be to:
 - develop and deliver an exemplar programme of PhD transferable and leadership skills training delivered flexibly to create employment-ready physics doctoral graduates for the economic benefit of the UK;
 - increase employer engagement with HEIs including PhD internships, industrially-sponsored studentships and Knowledge Transfer fellowships;
 - enhance the impact of SEPnet's research via a clear, collaborative impact strategy;
 - enhance research environment diversity through engagement with Athena SWAN and the IOP's Project Juno.
2. Expansion of its employer engagement and internship programmes, widening the range of work experiences available to enhance undergraduate (UG) and postgraduate (PG) employability and progress to research degrees.
3. Enhancement of its Outreach Programme to deliver and disseminate best practice in schools and public engagement and increase diversity in physics education.

The inclusion of new partners The Open University and University of Hertfordshire broadens the range of teaching and postgraduate research in the network. The University of [Reading](#), about to introduce an undergraduate programme in Environmental Physics (Department of Meteorology), will join as an associate partner.

A key part of the contributions from each partner is the provision of "SEPnet PhD Studentships", a programme to attract the brightest and best physics graduates to engage in a programme of collaborative research within the network, of joint supervision and with a broad technical and professional graduate training programme within the SEPnet Graduate Network.

The network will be led by the [University of Southampton](#). Its Vice-Chancellor, Professor Don Nutbeam said: "I am delighted that the University of Southampton, in partnership with nine other universities in the region, is able to build on the success of the SEPnet initiative to reinvigorate the university physics teaching and research and take it to a new level in the turbulent period ahead for the higher education sector. The SEPnet training programme brings novelty, quality and diversity to the regions physics postgraduates that we expect to be a model for other regions and subjects."

For further information on SEPnet, please contact its Executive Director, Dr James West at the University of Southampton or on executivedirector@sepnet.ac.uk