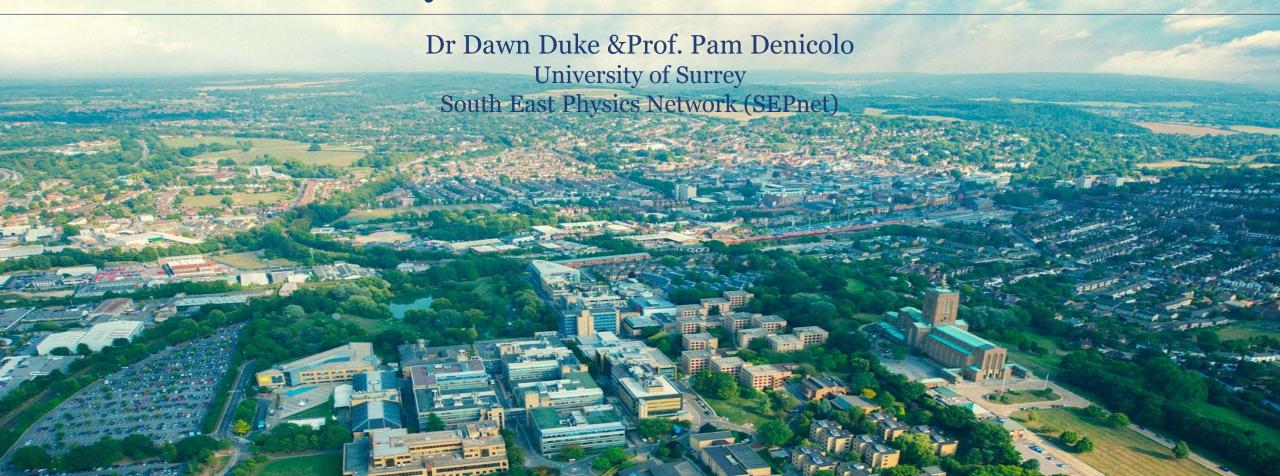


# The Whole is Greater than the Sum of Its Parts: Employer-Doctoral Researcher Engagement Facilitated by Cross-Institutional Collaboration



### **SEPnet Historical Overview**



#### **Background (circa 2007):**

- Long term decline in Physics UGs and financial weakness in Physics departments in SE England; Physics was vulnerable
- Closure of Physics at Reading

#### Response:

HEFCE funded collective action to form a network of initially 6 then 9/10 physics departments

#### Focus for UG and PGR:

- Increase applications/registrations
- Employability skills and attitudes

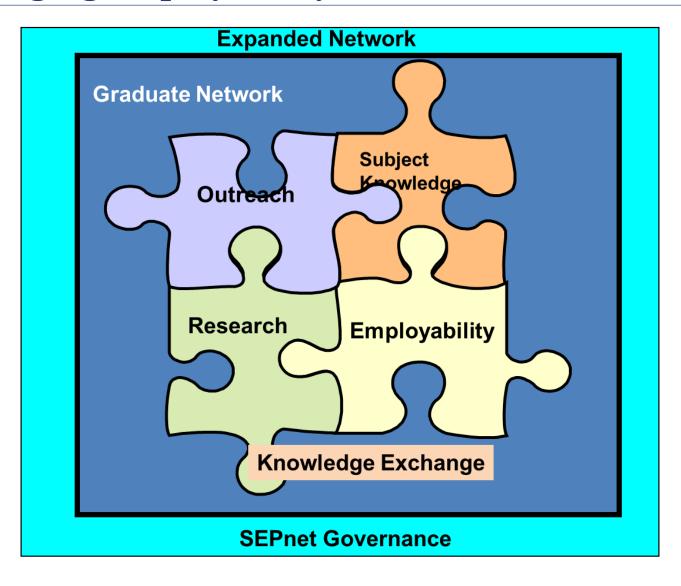
### Focus for academic colleagues and employers:

- Culture of mutual understanding
- with collaborative projects of many kinds.

2013 The next step: Focus on doctoral education and employability

## GRADnet: Bringing employability into the doctorate





### Bringing Together Employers and Doctoral Candidates



- Employers on advisory panel
- Central manager to build and maintain an employer network
- Employer engagement officers at each partner institution to work locally to build employer connections and run employer engagement events.
- Central training director and training consultant to create training that integrates employer input into skills training.
  - A variety of training workshops, and residential schools
  - Targeting all stages of the doctorate.

Employer Connections: Networking Evenings











# Employer mentoring





Employers actively participating in skills training

UNIVERSITY OF SURREY

https://www.youtube.com/watch?t=288&v=2pAVS4MiQy8





### Feedback from employers



"It was an absolute pleasure to be involved with the Summer School last week. It was very evident that all the participants had put in a massive amount of thought and effort to their case study's. I have taken some great ideas away with me and will be doing a write up on the day, I do intend to use some of the ideas that the students generated but maybe slightly adapted and I shall let you know as and when this happens. Deciding a winner was so difficult as they all had great ideas."

-Pentagon Plastics

### Flexible Industrial Placements/Internships





"It showed me how PhD skills can be transformed and used within an industry or commercial environment."

"The placement has assisted me in a number of ways. It will bridge the gap existing in my CV between academia and industry work and add more value to it - making me more employable. My network is stronger with additional contacts at NPL. I can manage more than one project at a time through my recent experience."



### **Feedback from Academics**



"Better engagement by other supervisors would help but it is early days to be able to say whether we are having an effect on graduate employability in physics. The training should lead in the right direction though."

"The greatest difficulty we have to overcome is finding a practical way for 9 institutions to work together to deliver material through various media, on-line, Face to Face."

"There needs to be more effort put into demonstrating what has been achieved to provide ideas about other joint working: collecting case studies to showcase, tracking on-going relationships as evidence of positive outcomes."

### **Feedback from Researcher Developers**



"Although I have not yet been able to evaluate results or outcomes in my own institution, the initiatives I have seen have been very impressive- the consultancy challenges with real world problems and the Q & A with employer panels. I think the PGRs benefit from insights from employers. I think the PGRs also need support in unpicking what employers really want – how to 'translate' the attributes they have into the work context."

"There needs to be better promotion of the really excellent training within and between institutions – this is a model that other departments than physics could benefit from."

### Feedback from SEPnet team



The GRADnet activities provide opportunities for the team, the students, employers and other members of the university to learn more about each other's requirements."

"Employers are getting a better feel for physics students' long term aspirations – they no longer stay in the same job for life. They also find out about typical physics doctoral graduates – their overall capabilities."

"The individual departments have done little to change their training programmes of PGRs – they are in effect leaving it to us – more engagement would be helpful."

"We are building up a portfolio of cases and activities but we need a much wider range of student engagement – some students attend a lot and some none of the workshops and residential schools. Partly that denotes satisfied customers but it also highlights the need for more supervisor engagement and support".

### Some Metaphors GRADnet Lives by: (Ave Lakoff and Johnson)



- GRADnet institutions: The strength of the whole is greater than the sum of the strength of the individual parts.
- Who shares wins! Collaborations and partnerships are the intelligent responses to the fast changing and demanding world facing the HE sector and our students.
- A spider's web making links with different groups but fragile and susceptible to breaking in some parts or growing in different ways in others.
- A little like public understanding of the NHS. It is something to which we are all committed and undoubtedly a good thing but it is for others and I do not need it right now so why should I pay more?
- Events are 'safe havens' for students where pressures can be left outside so they can
  explore and reflect on their skills and choices inside.
- Just like the EU everyone wants the benefits but doesn't want to incur the obligations necessary to gain the benefits.
- A newly established garden- some bits will flourish at the expense of others, there are and will be some beautiful flowers and delicious fruit- but only if we work together to nourish them and keep back the weeds.

