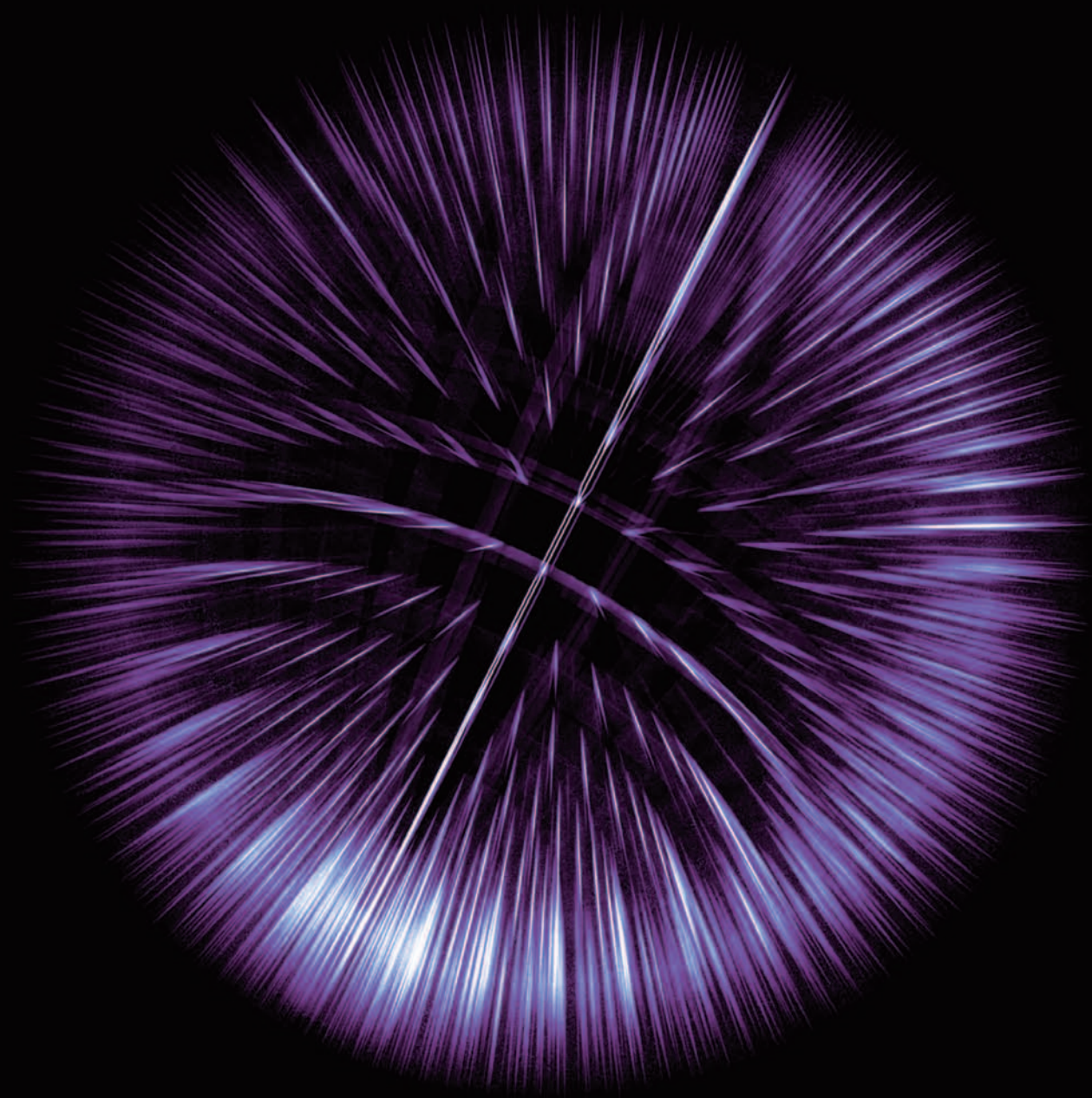


An Institute of Physics report | November 2013

# Evaluation of Project Juno: Summary of Final Report



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## Introduction

Project Juno is an award scheme run by the Institute of Physics to recognise and reward physics higher education departments that are making progress in addressing the under-representation of women at all levels in university physics. There are three levels of award: Supporter (at the time of the evaluation, 19 physics departments fell into this category), Practitioner (eight departments) and Champion (six departments).

In 2013, the Institute commissioned an independent evaluation of Project Juno to understand the impact that it has had on the physics departments that have participated in the scheme. The aim of the evaluation was to gather qualitative and quantitative evidence to assess the impact of Juno in its first five years of operation.

# Evaluation process

## The evaluation

The evaluation sought to address the following key questions:

- Why do departments engage with Juno?
- What is the knowledge, understanding and perception of the Juno principles?
- What difference has Juno made and in what other ways have departments benefited?
- What are the current gaps in the Juno scheme?
- What are the factors that enable and inhibit engagement with Juno and/or Athena SWAN?

The evaluation was conducted in three stages:

- A review of the quantitative data on physics students and staff since 2007/08 to the current date, to highlight any changes in female representation.
- Surveys of staff in physics departments were developed to assess opinions about, and the impact of, Juno from the perspective of:

All staff: 15 physics departments agreed to send out the survey link to their staff and 175 responses were received.

Juno leads: survey was sent out to all 33 nominated Juno contacts; 21 responded (64%).

Heads of Juno departments: a survey was sent out to all 33 heads of Juno departments: 24 responded (73%).

Heads of non-Juno departments: a survey was sent out to the 23 heads of non-Juno departments and eight responses were received from (35%).

- Focus groups were held in five departments who had engaged with Juno at different levels and over different timescales. A key aim of the focus groups was to explore the impact of Juno from the perspective of staff at different career stages.

# Findings of the analysis of HESA and UCAS data

<sup>1</sup> For more information about HESA data and its caveats, visit [www.hesa.ac.uk](http://www.hesa.ac.uk).

<sup>2</sup> In the raw data for individual institutions, categories that include fewer than three are suppressed. For the purposes of the analysis, these data are replaced by "1" in each case. Inevitably, this will lead to small inaccuracies in the numbers presented in the tables.

Data were analysed for physics cost-centre staff, and physics and astronomy students drawn from the HESA student and destinations of leavers from higher education (DLHE) datasets<sup>1</sup> and student data from the University and College Admissions Service (UCAS)<sup>2</sup>. Within each Juno status group

(Supporter, Practitioner or Champion) there was a great deal of individual variation by department, but overall there was no clear relationship between the Juno status of departments and the proportion of staff or students who were female.

# Findings of the surveys and focus groups

## Awareness of Juno

In general, there was a high level of awareness of Juno across all departments, even those not involved in Juno, although 14% of staff in Champion departments reported that they were “not sure” if their department was involved in Juno or that they “had never heard” of Project Juno. Knowledge of Juno was particularly low among PDRAs and administrative staff, and particularly high among women.

## Motivations for engaging with Juno

Most commonly, Juno work was initiated by either the previous or current head of department. There was a range of opinion about the key although groups in all departments identified moves by funding bodies to require departments to demonstrate a commitment to gender equality as a key driver.

*“The embedding of existing good practice was a key point of motivation particularly at a point of rapid growth; that a positive culture is maintained and is not dependent on existing staff in post.”*

## Data collection

Even in Champion departments, low numbers of staff were generally aware of the data collection that was required. Departments generally found that where data were held or collected centrally, this was extremely difficult.

*“All data are gender-disaggregated and discussed e.g. admissions, recruitment, seminar speakers, outreach, everything. When anything is discussed, gender is part of it including the refurbishment of the building.”*

## Discussion of gender equality in committees

Much higher numbers of staff in Practitioner or Champions departments reported that gender issues were discussed in departmental committees, although generally gender issues were not widely discussed regularly by committees other than those specifically charged with diversity responsibilities.

## Perceived benefits and changes arising from Juno

There were many identified benefits and changes arising in departments as a result of Juno, including awareness of staff and senior management in women in STEM issues, discussion on gender issues within the department and visibility of female staff.

*“It gave us proper representation and helped us as researchers to feel more valued, that our voices can be heard.”*

*“We have lost a number of very talented people and don’t want to keep doing that. Two or three female members left and have built successful academic careers elsewhere, which they could have had here.”*

Practical changes included setting up a Research Staff Forum, improved gender ratio of seminar speakers, improved recruitment literature, web pages and open-day material to ensure more women were visible, changes to the wording of job advertisements, changing performance reviews to being conducted only by the head of department, introducing promotions workshops, introducing more formal flexible working, and introducing a mentoring scheme for PDRAs.

*“We have increased the number of women seminar speakers from 5% to 20–30%. It is Juno that made this change.”*

## Improving the representation and visibility of women

Most departments reported improvements in the representation and visibility of women, and particularly highlighted where this made a difference at senior levels.

*“Since a woman became head of department, and another head of research funding, I’ve felt a difference. You can see the promotion level, it’s very obvious. It gives a message of equality, just feels good, that women can do it based on capability, that promotion is open to any gender, if you’re good you can be there.”*

# Findings of the surveys and focus groups

## Improving departmental culture for all

Overall, respondents in Juno Champion departments rated departmental practices (such as appraisals, promotions and flexible working) more highly than respondents from Juno Supporter departments and non-Juno departments.

Across all focus groups, it was noted that there had been a beneficial impact on the culture of the department. This included creating a positive work environment to encourage people to stay, helping to attract the best people to work in the department and seeking to get equality and diversity awareness embedded at all levels.

## The longer-term impact of Juno

More staff in Champion departments felt that there had been a lasting effect on culture, although the majority of staff felt that it was too early to tell.

## The main challenges to Juno

The most significant challenge to Juno, cited by all, was lack of time to carry out the work.

Recognition for work was also a significant challenge and there was a general feeling that this work fell disproportionately on women. Some concern was expressed that Juno (and Athena SWAN) were increasingly seen as “badges” rather than delivering genuine culture change.

*“I’m aware that women are overly burdened by the Athena SWAN/Juno administration. This leads to worries that it’s an awful lot of women doing this; that women are taking on the nurturing role for changing the departments but this doesn’t in turn lead into or create permanent roles for them.”  
(Male head of department)*

## Value: the worth of the Juno Award

Juno, because it was delivered by IOP, was valued as a scheme that understands and relates to a physics-specific context that compares “like with like”. It was seen to have credibility and influence to effect change within the department.

*“Juno is subject-specific. It gives it strength.”*

There was comment from two departments that they felt that IOP as an institute did not fully promote the Juno Project within its own

membership and should take more opportunity to do so, for example, at annual meetings.

## Suggestions for improvements to the scheme

All improvements to the scheme mentioned were around clarity of guidance and principles from IOP, rather than amending the scheme itself. Generally, members were unsure of what was really required at Practitioner and Champion level.

*“It would be good to see what is required to meet the evaluation points. Perhaps we could see other people’s applications – even if anonymised to see what works in that particular section.”*

Knowing how to evidence good practice and how to use statistics meaningfully when the numbers of women were extremely small were particularly highlighted.

## Support from IOP

All of those involved believed that IOP provided useful support but that the communication of the details of what was available needed to be improved. The visit was highlighted as being particularly useful and an opportunity to receive constructive feedback. A template with national average data, provided by IOP, would be very helpful.

*“It [the visit] was very, very helpful and it felt like we were being helped towards something rather than an examination.”*

## Engagement with Athena SWAN (AS)

Generally there was some confusion about the different levels of Athena SWAN and how they interacted with Juno.

*“Applying for two awards with similar content but different formats required twice as much work for the same thing.”*

However, the IOP “brand” is recognised and trusted; hence Juno is recognised as a mark of quality and IOP was generally regarded as having higher status than the Equality Challenge Unit.

*“Since we already had Juno Champion status we just had to write a letter and re-cast some stuff in a slightly different way for Athena silver.”*

## Departments not engaged with Juno

Heads of physics departments that were not engaged with Juno were sent a separate survey about women in science activities in their departments. Eight heads responded, of which six reported that they were considering joining Project Juno, and four that they were working towards an Athena SWAN award.

*“I took over as head of physics only last year. I had not heard of Project Juno. Athena SWAN activities are organised at a school (not departmental) level. Our school has silver status.”*

In addition three heads reported that their department had a nominated person for women in science initiatives.

Heads were also asked to indicate what they felt were the main challenges in taking forward women in science activities in their departments. Heads selected relatively few challenges, although five did select a lack of time to carry out the work, which is in line with the responses given by Project Juno leads and heads of Juno active departments.

*“Probably the weakness of Juno is that cross-university they don’t know Juno but they do know Athena SWAN, particularly at senior-management level.”*

# Conclusions and recommendations

It is clear from all of the evidence presented from the surveys and focus group work that Project Juno is clearly acting as a driver for change, and concrete examples of changes in policy and practice have been articulated, with associated benefits to working environment and culture.

## **Recommendation 1**

We recommend that IOP continues to invest in Project Juno as an effective vehicle for engaging physics departments and a catalyst for culture change within physics departments around the under-representation of women in physics.

## **Recommendation 2**

We recommend that consideration should be given to encouraging departments who have been involved in Project Juno without moving to Practitioner or Champion status to put in place plans and resources to apply for recognition awards.

## **Recommendation 3**

We recommend that IOP requires a breakdown of the Juno Committee by gender and seniority, and demonstrates the involvement of key heads of research groups and PDRAs as part of a Champion application, or Champion renewal.

## **Recommendation 4**

We recommend that IOP increases the profile of Project Juno to all of its members, and promotes the scheme and the good practice therein at IOP events as appropriate.

## **Recommendation 5**

We recommend that IOP considers how to ensure that an individual's work on Juno is recognised by departments as part of their Juno application.

## **Recommendation 6**

We recommend that Project Juno provides evidence, good practice and ongoing support to Juno Champions, committees and others to enable them to overcome this resistance.

## **Recommendation 7**

We also recommend that IOP takes on board the operational recommendations to make beneficial changes to the scheme.

## **Recommendation 8**

We recommend that Project Juno re-articulates, clarifies and improves their support offer and guidance, and continues to resource this important element of the scheme.

## **Recommendation 9**

We recommend that consideration be given to building on this recognition and developing the Juno brand, in particular with universities themselves and funding bodies.

## **Recommendation 10**

We recommend that improved links between the two schemes be explored to reduce duplication and increase complementarity.

## **Recommendation 11**

We recommend that IOP supports physics departments in their aspirations and actions to achieve Athena SWAN Gold.

## **Recommendation 12**

We recommend that IOP communicates the status of Juno with regard to research council funding to their physics department and for IOP to continue to liaise with the research councils themselves to gain further recognition of the Juno award.



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