

CUWiP UK

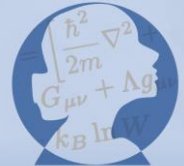
Conference for Undergraduate
Women in Physics UK

Exploring your Future in Physics

OXFORD March 2015

Why a conference for Women?

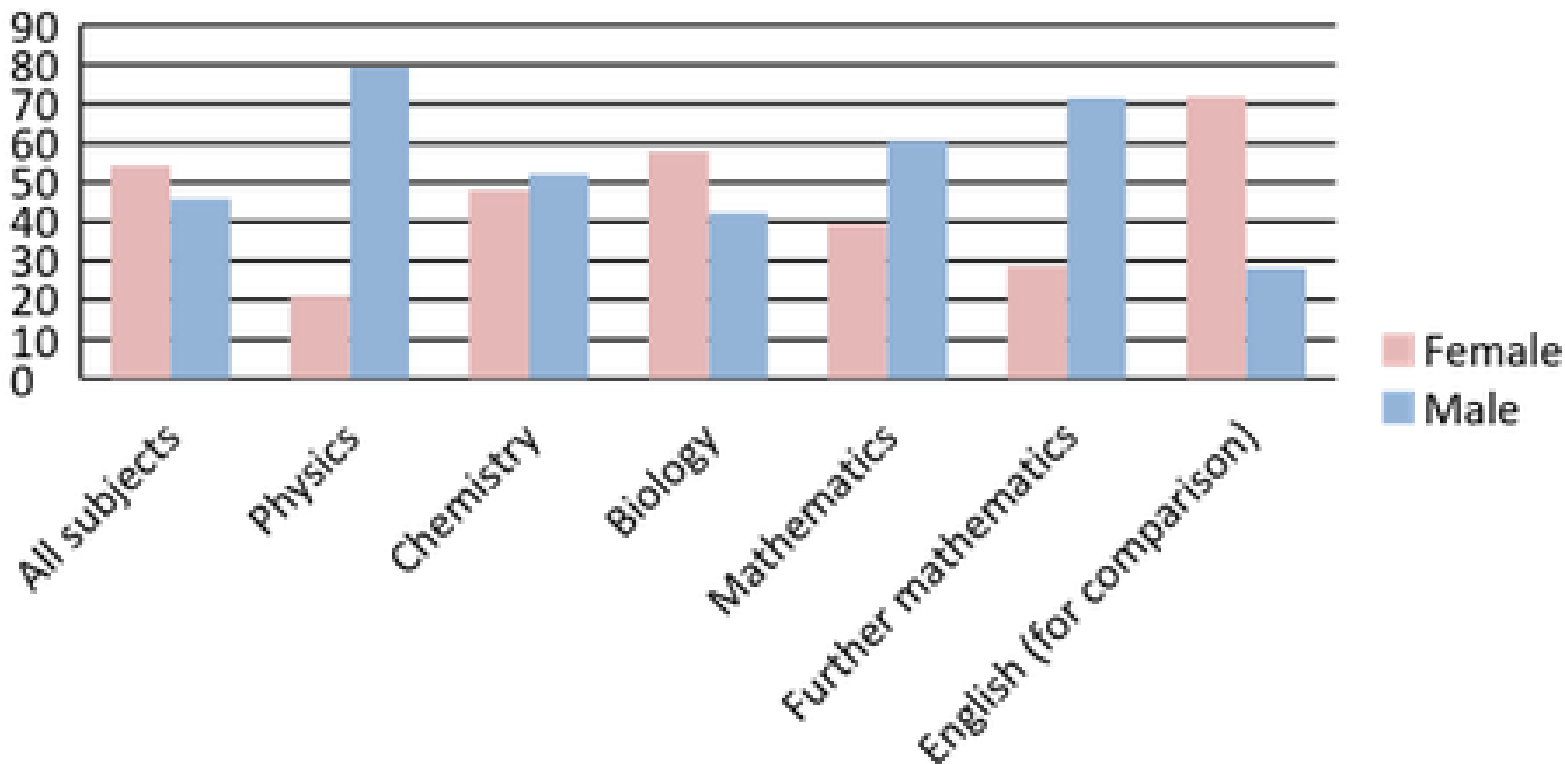
D. Bortoletto



The Statistics (I)

2013

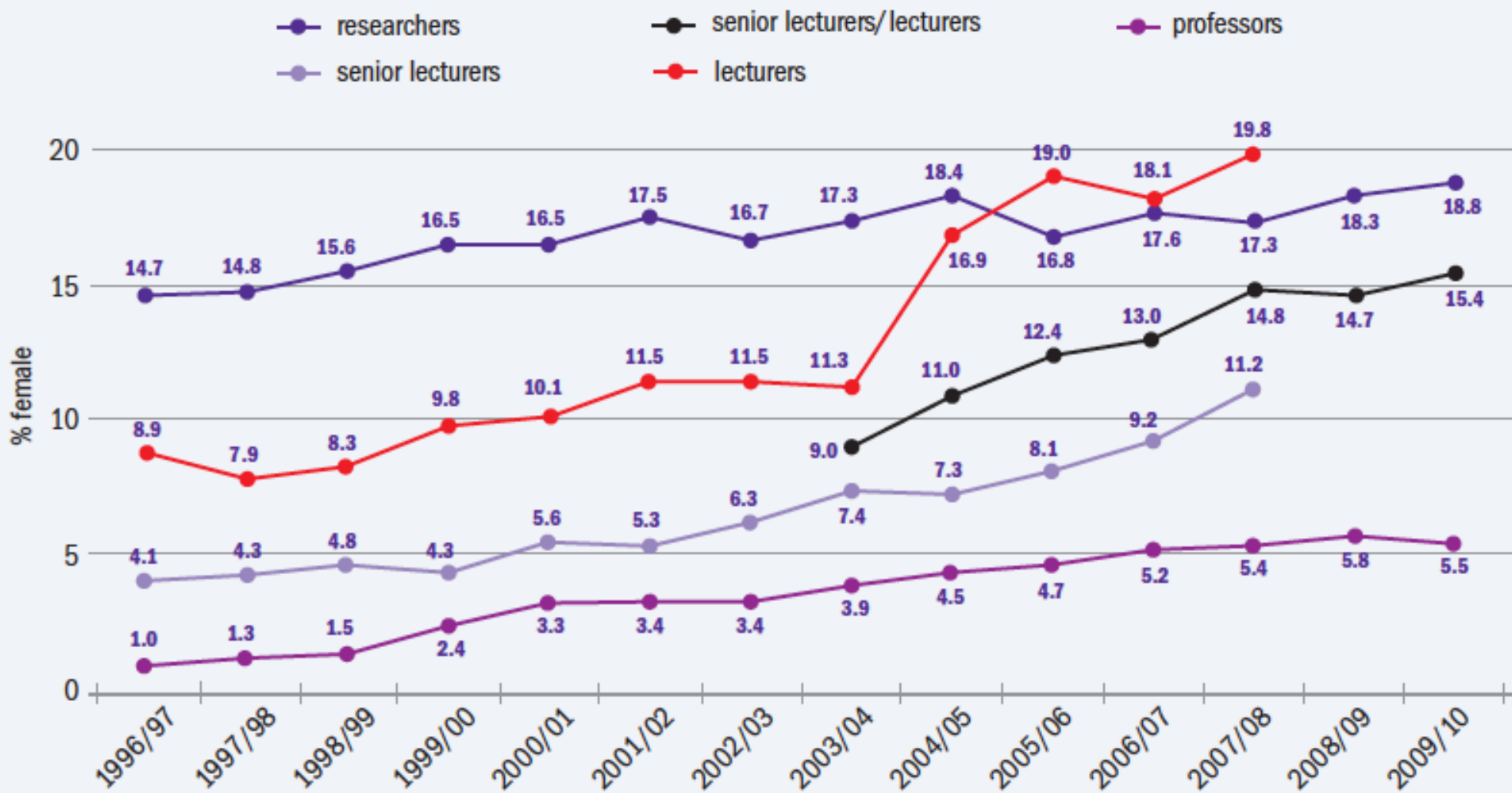
Chart 5: Percentage of A levels by gender

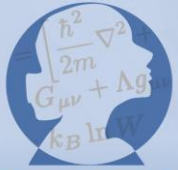


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The Statistics (II)

Figure 3: Proportion of staff that is female in the physics cost centre at each grade 1996/97 to 2009/10

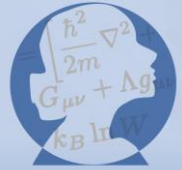




Evidence of bias

- 63 male, 64 female science faculty
 - physics, chemistry, biology
 - 6 research universities: 3 private, 3 public
- CV of graduating senior looking for job as lab manager.
“John” or “Jennifer”
- Both men and women:
 - See the male candidate as more competent
 - Were more likely to hire him
 - Starting salaries ~30k for him, 27k for her

Moss-Raucusin, Handelsman, et al. 2012 PNAS



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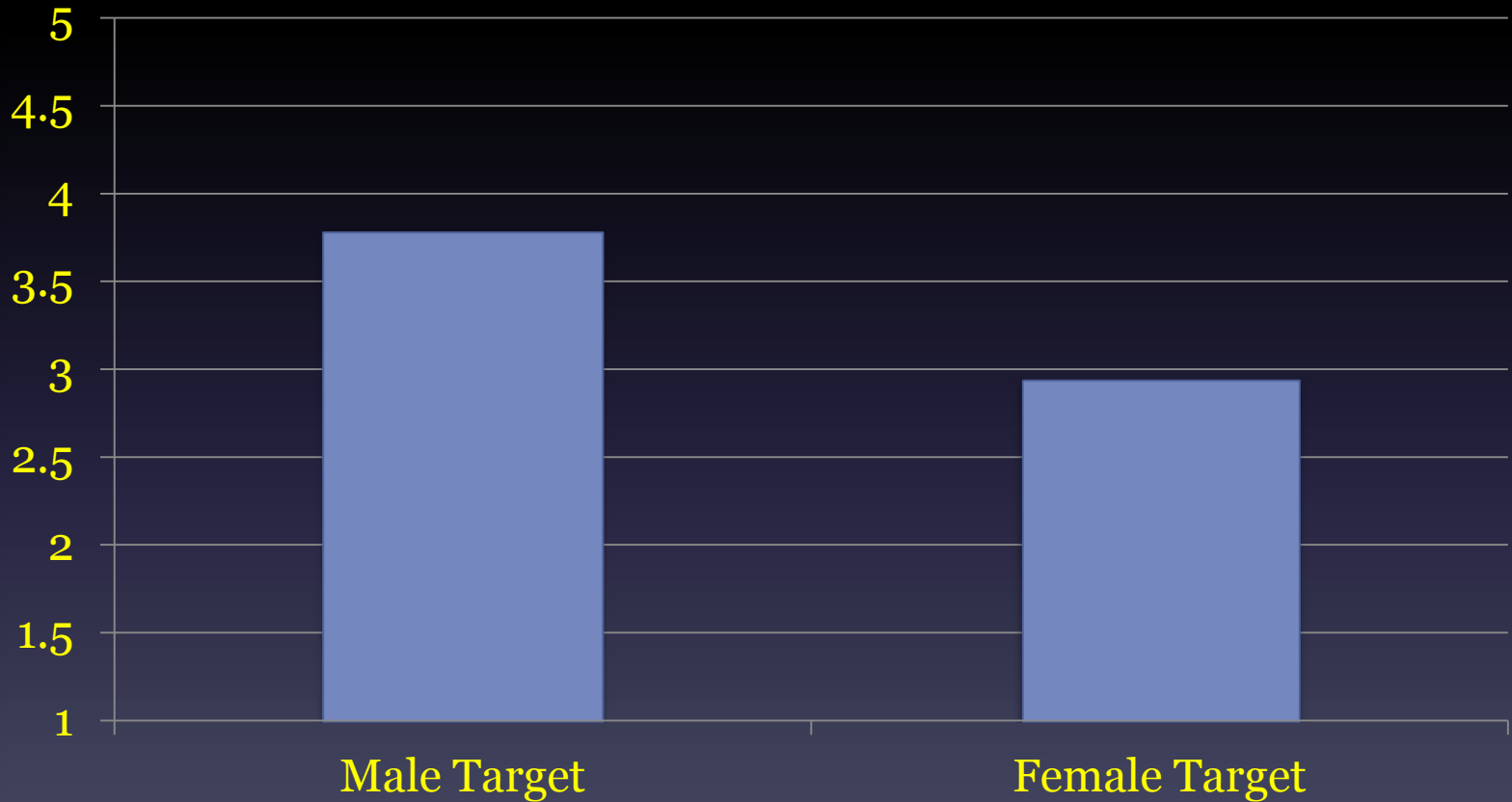
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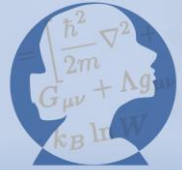
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Results: Would Jennifer or John Be Hired?

Hiring



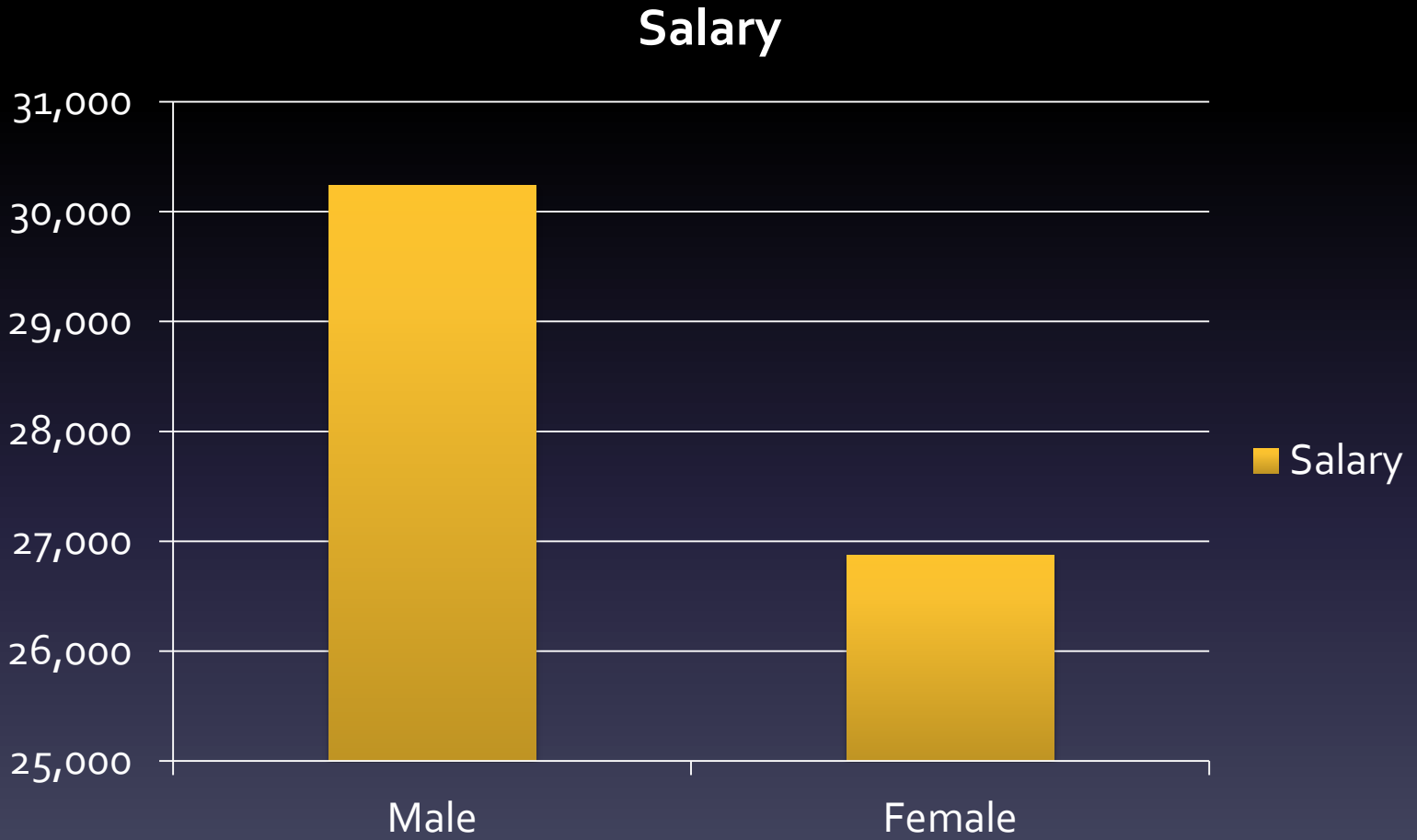
$t(125) = 4.22, p = .001, d = .70$



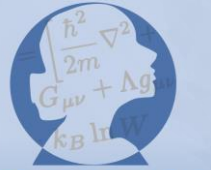
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How much would Jennifer or John be paid?



$t(125) = 2.94, p < .01, d = .51$



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Goal I: Convey the broad range of opportunities available to Physics majors - with or without an advanced degree.

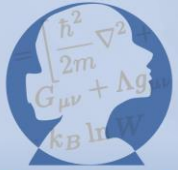
- Pursue an advanced degree in physics, engineering, biophysics, health physics, medicine, law, education, ...
- Conduct forefront research in physics, engineering, biophysics, health physics, ...
- Pursue a career in policy, teaching, law, medicine, philosophy, history of science...
- Work in companies that depend on 21st century technologies

- **Workshops**
- **Panels**

- **Presentations**
- **Tours**

- **Panels**
- **Presentations**

- **Panels**
- **Workshops**
- **Tours**
- **Literature**



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Goal II: Combat isolation, provide role models

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- Female physics majors will often
 - be the only female student in their courses for physics majors;
 - have never taken a physics course from a female faculty member, conducted research with a female physicist, or otherwise had a female role model in physics.

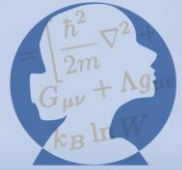
Networking opportunities among students, speakers, panelists, etc.

Goal III: Counteract effects of gender stereotyping; build persistence.

- Provide information on implicit bias and its effects on women, stereotype threat, and related research.
- Provide opportunities for discussions and interactions in a positive, supportive environment.
- Encourage speakers and panelists to discuss their personal career path-- both successes and challenges.

- **Presentations**
- **Panels**
- **Literature**

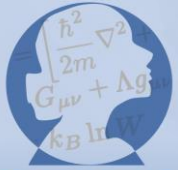
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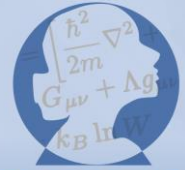
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Goal IV: Introduce students to data and resources available through national societies.

- IOP
<http://www.iop.org/>
- IOP Women in physics group
<http://www.iop.org/activity/groups/subject/wip/>
- National STEM center
<http://www.nationalstemcentre.org.uk/>
- Sciencegrrl.co.uk
<http://sciencegrrl.co.uk/>

- **Panels**
- **Literature**
- **Networking**
- **Presentation**

The CUWiP Organizing Committee



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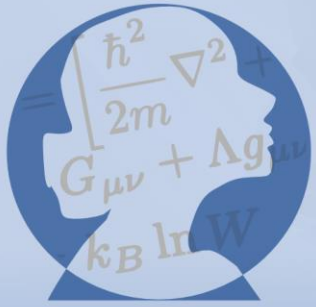


+ many others volunteers including Mehpare Atay, Tessa Baker, Catherina Hale, Merritt Moore, Nana Liu, Danielle Kaminski, Anabella Araudo, Josue Martinez Hardigree, Talitha Bromwich, and Grzegorz Agacinski



Ilaria Gianani Diana di Paolo Aprajita Verma Sarah White Judith Hillier

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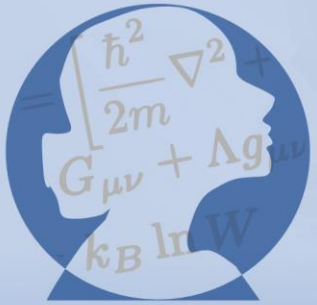
speakers
discussions
undergraduate
workshops
inspiration
personal female
laboratories
panels
teamwork
students
development
Women
physics
university UK
physicists
leadership

- Take advantage of these opportunities
- Enjoy the conference
- Help us make this an annual event



Acknowledgements:
• Vice-Chancellor's Diversity Fund,
• University of Oxford
• APS Physics

A few Announcements



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Exploring your Future in Physics

- You badge contain important info:
 - RAL tour
 - Workshop group
- Choose the Oxford Physics lab tour of your interest (Tour A, B, C)
- Follow your guide, pay attention crossing the street, observe the eclipse, and board the coaches for RAL

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