

# Sheila McBreen

School of Physics  
University College Dublin







**University College Dublin**  
BSc Joint Honours (1995-2000)  
Computer Science & Experimental Physics  
*Year Work Experience: Sun Microsystems (1999)*

**University College Dublin**  
PhD (2000-2004)  
*Observational Astrophysics: Gamma-Ray Bursts*



**European Space Agency**  
PhD (2004-2006)  
Research Fellow



**Marie Curie Fellowship at Max Planck**  
PhD 2006-2008  
Gamma-ray/optical/instrumentation/observing  
Followed by 3 year Postdoctoral Fellowship



**Lectureship at UCD :**  
started 2009





**University College Dublin**  
BSc Joint Honours (1995-2000)  
Computer Science & Experimental Physics  
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- UCD Science
- Summers abroad (Germany, US, Scotland) not doing any science
- Year working during degree in Sun Microsystems



**University College Dublin**  
PhD (2000-2004)  
*Observational Astrophysics: Gamma-Ray Bursts*



- PhD: initially funded by UCD
- IRCSET call
- Negative people
- 3 years funding, travel, fees



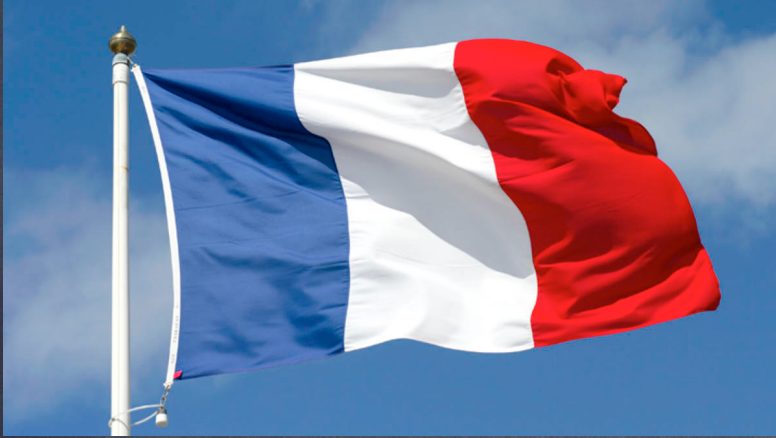
# Feedback



- First Marie Curie Application
- Rejected.

- **Positives:** science, match to host
- **Negatives:** did not address the training aspect at all!





- Was awarded independent funding in France, but declined.

**European Space Agency**

PhD (2004-2006)

Research Fellow





- Revised MC to go to Max Planck for extraterrestrial Physics (MPE)

- Successful
- Addressed the training in the second MC application
- Addressed management plan
- Detailed discussion with MPE group
- Read the evaluation criteria properly!



## Marie Curie Fellowship at Max Planck

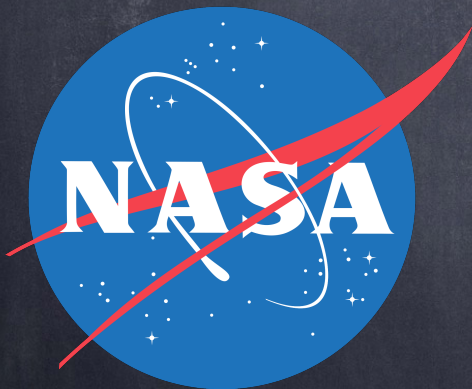
PhD 2006-2008

Gamma-ray/optical/instrumentation/observing

Followed by 3 year Postdoctoral Fellowship



- Excellent opportunities



- Signed to stay for 3 years



**Lectureship at UCD :**  
started 2009



- Marie Curie Re-Integration grant
- 3 years travel funding
- Lean years



**Since 2009**  
**Science Foundation Ireland**



- 2010: Good feedback, good marks
- Rejected & Dejected



- 2012: Funded
- More attention to impact and a long term strategy from the funding
- Partners in industry
- Academic support in NASA/MPE/Berkeley



Since 2009  
European Space Agency



- Special Measures for Ireland, 2010
- Hardware project with Lorraine Hanlon
- Building detector module
- SensL : Irish industry
- Out of 'comfort zone'
- 2.5 years funding





**Since 2009  
European Space Agency**



- Special Measures for Ireland, 2012
- Lorraine Hanlon & Ken Stanton (Engineering)
- Glass ceramic scintillators
- Further Out of 'comfort zone'
- 2 years funding, extending to 3.





# Others

- Fermi GI
- UCD Seed fund
- ESA Prodex – Excellent reviews but changed criteria
- ESO proposal – not funding, telescope time



# Spin-out Company

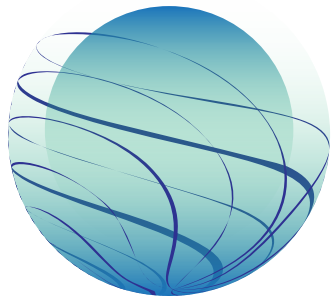


PARAMETER  
SPACE

- co-Founder & CTO, Lorraine Hanlon (CEO)
- Founded 09/2014, first contract 02/2015
- ESA contract : big data in astronomy
- Experience with ESA was vital



# Under Review



# LASSOED

Large Angle Space Survey for Optical Event Discovery

- co:PI with Lorraine Hanlon
- Made the cut
- TBD



# Students

- Encourage to go for IRC
- GF: IRC PhD
- DL: IRC EPS
- Travel grants
- GO funding
- Summer Schools



# Failure

- Failure is part of the process
- Take feedback seriously (but not personally)
- Use it to improve future grants
- Resilience
- Perseverance