Una carrera astronómica

Jaime E. Forero-Romero je.forero@uniandes.edu.co
Departamento de Física

Junio 2015



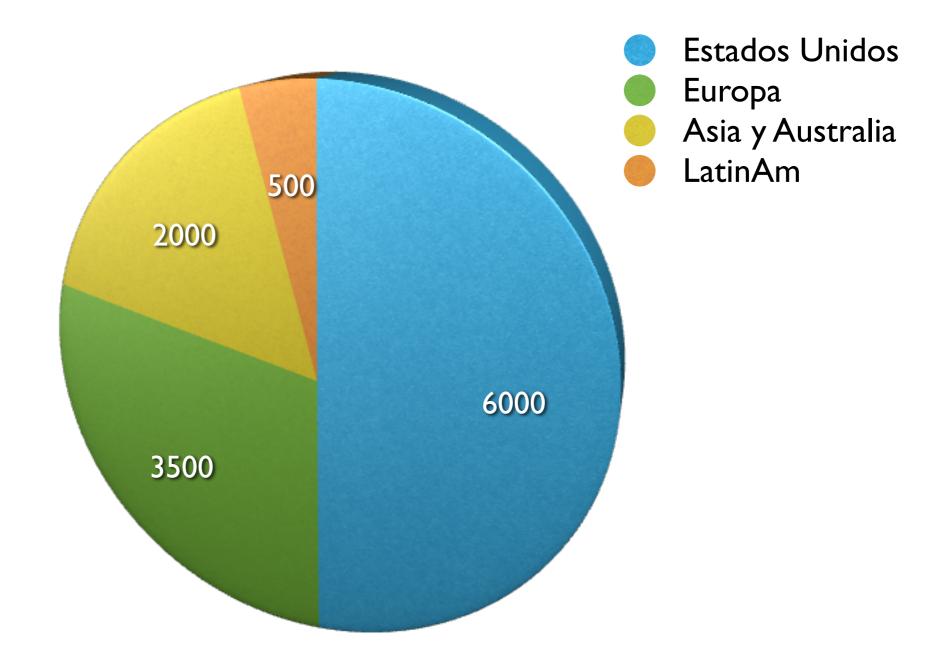
An astronomer is a scientist who studies celestial bodies such as black holes, moons, planets, stars, nebulae, and galaxies, as well as Gamma-ray bursts and cosmic microwave background radiation. A related but distinct subject, cosmology, is concerned with studying the universe as a whole. An astronomer researches the world beyond earth.



Professional astronomers are highly educated individuals who typically have a PhD in physics or astronomy and are employed by research institutions or universities.



Hay pocos astrónomos profesionales en el mundo





El número de astrónomos por millón de habitantes

Estados Unidos: 18 por millón

Alemania: 10 por millón

Chile: 5 por millón

Argentina: 2 por millón

Colombia: 0.7 por millón



Primeras fases hacia una carrera profesional

Pregrado (4 años)
Doctorado (4-5 años)
Postdoctorado (3-7 años)









WWW.PHDCOMICS.COM

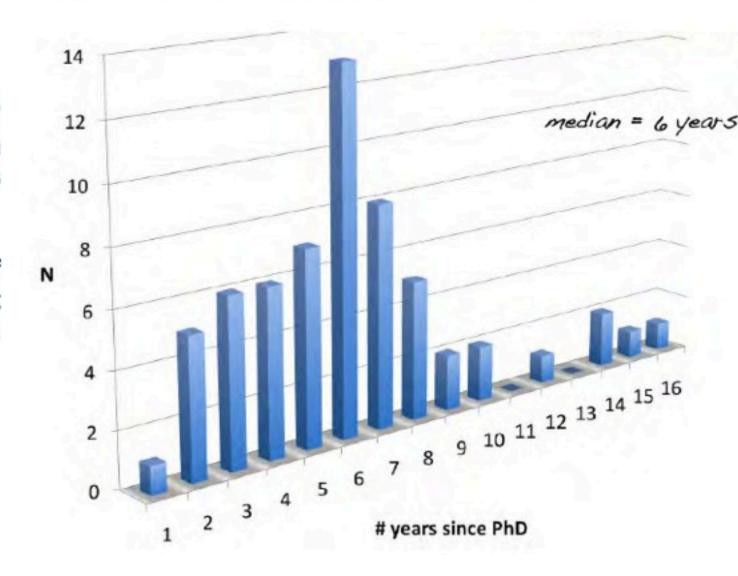




Some statistics on recent job hires in astronomy (continued)

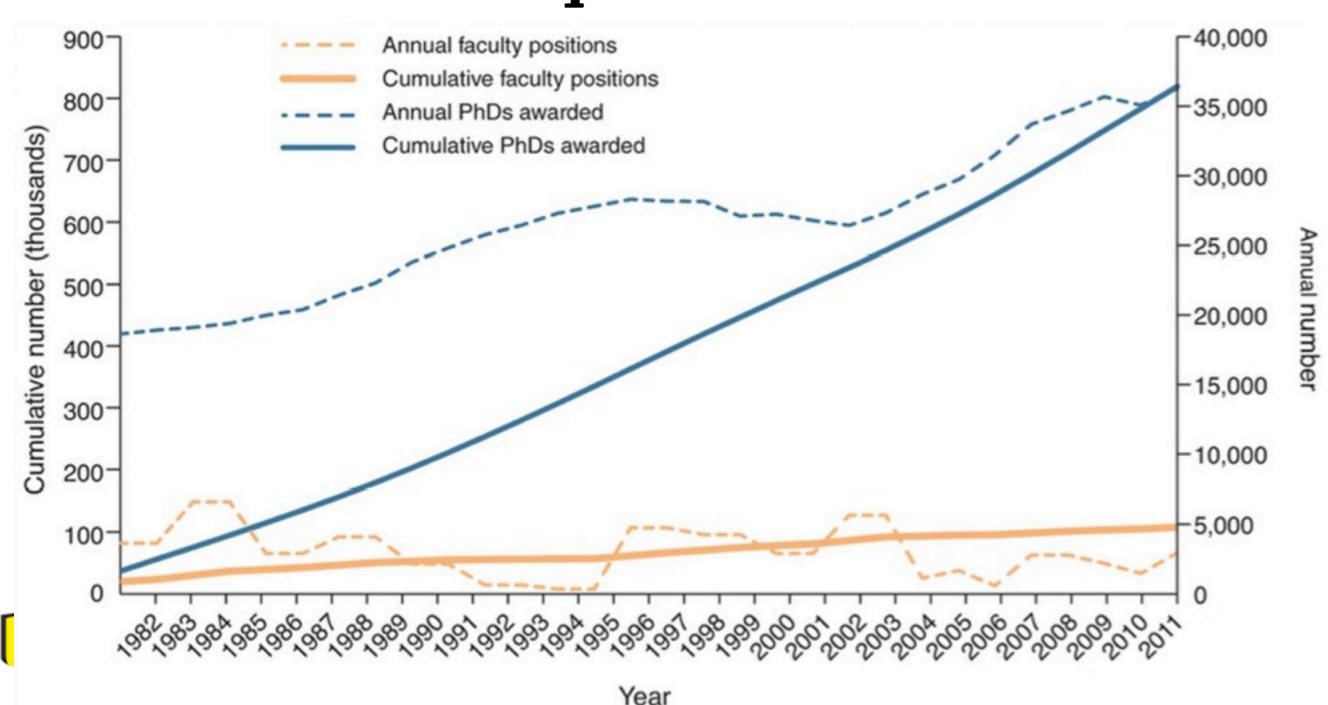
How long does it take to get a faculty or staff job? The most likely time is 2-8 years after the PhD, with the median being 6 years. The likelihood decreases rapidly after eight years.

Advice: You have a finite window of opportunity to obtain a permanent position, it gets harder (though not impossible) after that. Be patient but not complacent.

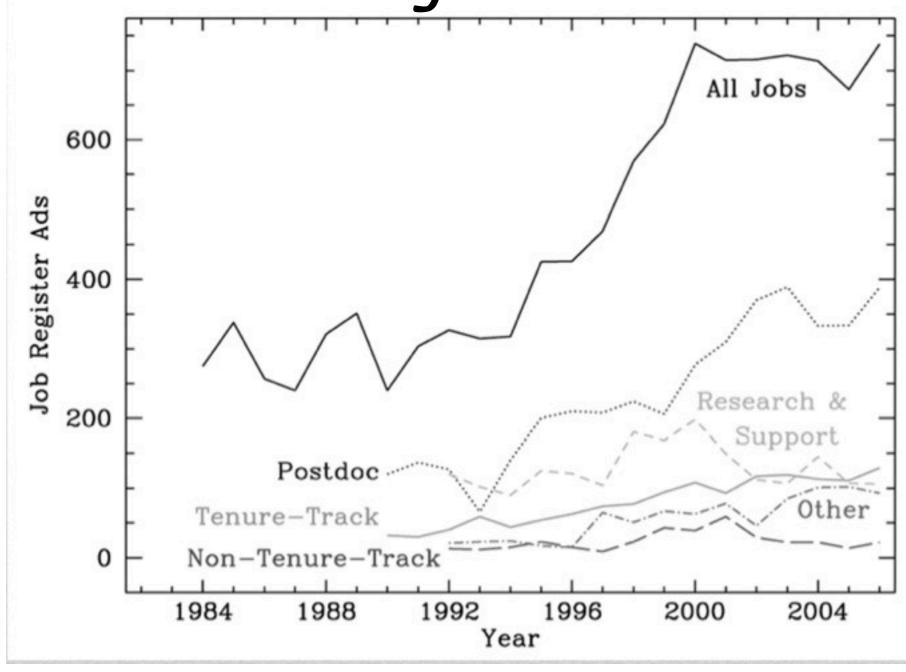




La competencia es dura en un mundo académico globalizado y desequilibrado



En astronomía (USA) la situación no es muy diferente





En astronomía (UK) la situación no es muy diferente

- A third to a half of the astronomy PhD students in the UK can expect a
 post-doctoral appointment at the end of their studies, but they may have to
 go overseas for it.
- It is unusual to achieve a permanent appointment in a university in astronomy before one's mid- to late-thirties.
- A minority of PhD students, perhaps a fifth, will achieve a career in astronomy in the medium term, again possibly overseas.

http://www.ras.org.uk/images/stories/ras_pdfs/careers%20in%20astronomy.pdf



The 4 Most Difficult Jobs to Land



almost 2 years ago by Maria Charalambous

3 🖒 0 🗐 177 🚱

CAREER

Astronaut

Undoubtedly one of the most cha no easy feat. You will need rigorou will face in space.

Model

This industry is considered ruthless b is so much competition and the stanc If cooking for the stars is o and only the models at the top of the cook tailor-made meals for

Private Chef

Astronomer

If you are passionate about learning about the universe and beyond but don't wish to venture into space to learn more, you may be considering a career as an astronomer.

To become an astronomer you will need outstanding maths and physics skills, as well as a PhD in either astronomy or physics. Before even being considered for a position within the field you must have demonstrable work experience in the industry, perhaps working in a scientific research firm, government agency or university.

Competition for a position is incredibly rife, while the number of openings per year is very limited. A job in astronomy is therefore on the most difficult in the world to land.



www.jobsforastronomers.com Our Mission

Careers for astronomers outside academia

Our mission is to provide information on **non-academia career paths** for **astronomers** and **astrophysicists** who might or might not have postdoc experience. As this website grows we will try to collect information from different sources (scientists, organizations, companies, astronomical communities, ...) in order to provide a more complete view of the employment opportunities either in government institutions or industry. We would appreciate your support in the form of information, your personal experience outside of academia, or a referral to someone you know who is willing to provide us with further information.

Please circulate our 5-point questionnaire to anyone you know who used to be an astronomer and now works at a non-academic job.

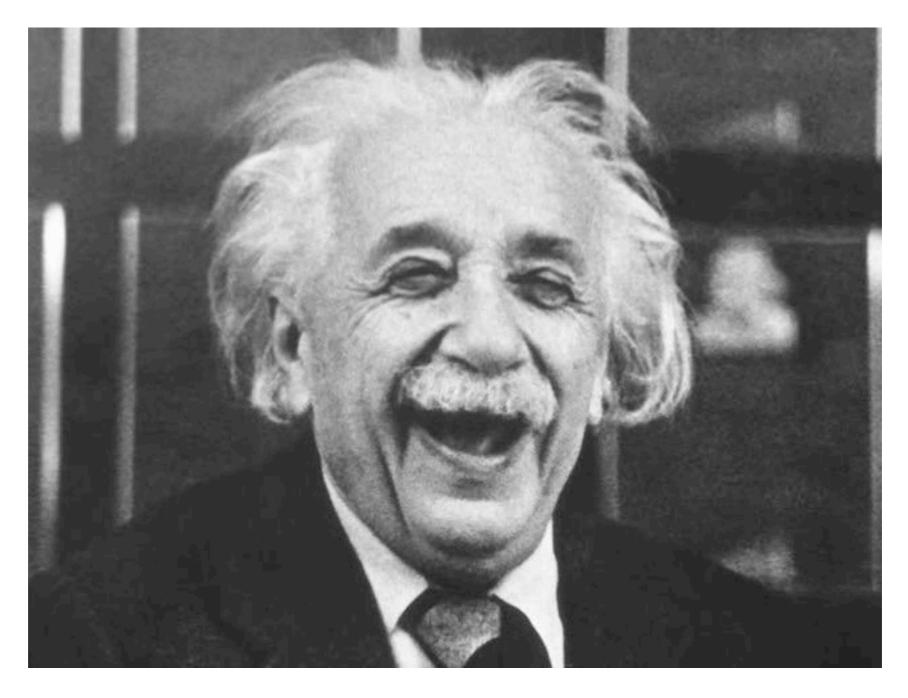
Please contact us if you would like to contribute to this initiative or sign up to receive updates. We will not give out your email address and will keep the emails to a minimum.



Hay dos caminos que aumentan la probabilidad de llegar a tener un trabajo fijo como investigador.



1. Sean genios





2. Hagan buena investigación. Sean productivos. Muestren habilidad técnica. Asocien su nombre a algo. Muestren capacidad de conseguir dinero para investigación. Hagan amigos.



Las cartas de recomendación son importantes

In November of 1911, two of the world's most revered scientists, Henri Poincaré and Marie Curie, were asked to write letters of recommendation for a 32-year-old man who was looking to become a professor of theoretical physics at ETH Zurich (Swiss Federal Institute of Technology), and who, 6 years previous, had authored a renowned set of groundbreaking scientific papers. That man was Albert Einstein. Then a respected professor at Prague's Charles-Ferdinand University, Einstein was keen to return to his alma mater in Switzerland to teach; however, certain local officials in Zurich weren't convinced of his suitability.

These invaluable letters soon arrived. Einstein moved to Zurich some months later.

Mañana:

The Art of Being a Scientist

A Guide for Graduate Students and their Mentors

ROEL SNIEDER AND KEN LARNER

A PHD IS NOT ENOUGH!

A Guide to Survival in Science

REVISED EDITION

PETER J. FEIBELMAN

