

5 *Habits of Highly Effective Postdocs*

*(from my biased angle and with a
focus on university careers)*

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EBERHARD KARLS
UNIVERSITÄT
TÜBINGEN



About Myself (& My Wife)

- ♦ 2000-2004 studied Physics
- ♦ 2005-2008 PhD in Astrophysics
- ♦ 2008-2010 Postdoc
- ♦ since 2010 Akademischer Oberrat at the Institute for Astronomy and Astrophysics in Tübingen.



- ♦ 2001-2005 studied Intercultural Language and Business
- ♦ 2006-2009 PhD in Intercultural Communication
- ♦ 2010-2014 Postdoc in International Business
- ♦ since 2014 Assistant Professor in International Business

The IAA Tübingen



Willy Kley

Computational Astrophysics



Kostas Kokkotas

Theoretical Astrophysics



Andrea Santangelo

High-Energy Astrophysics



Klaus Werner

Stellar Atmospheres

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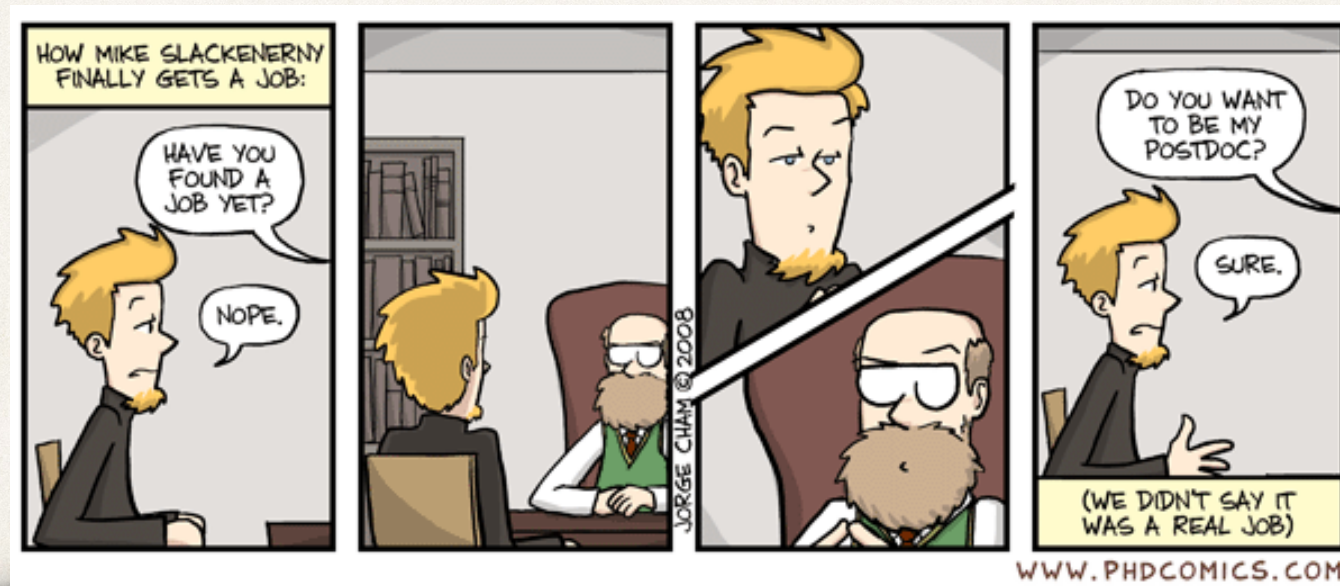
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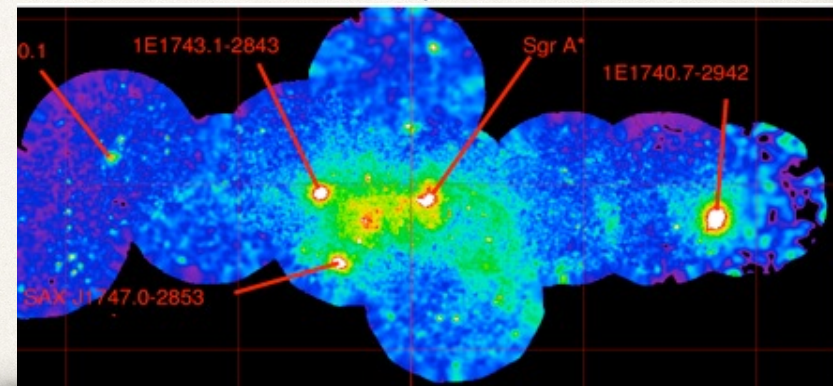
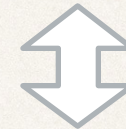


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Assembly of Mirror shells (NASA/GSFC)



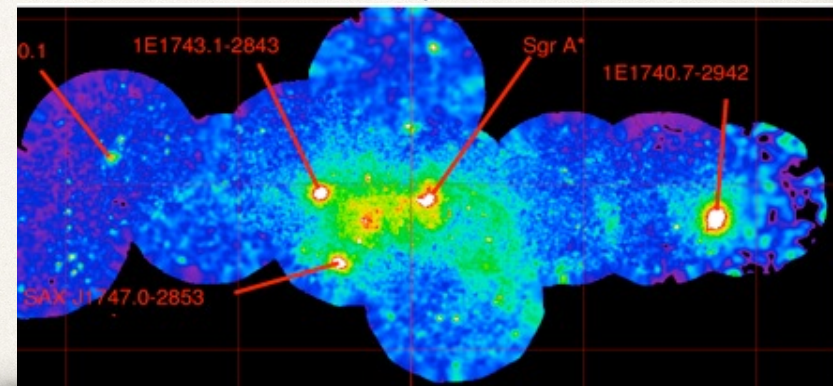
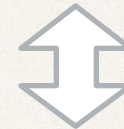
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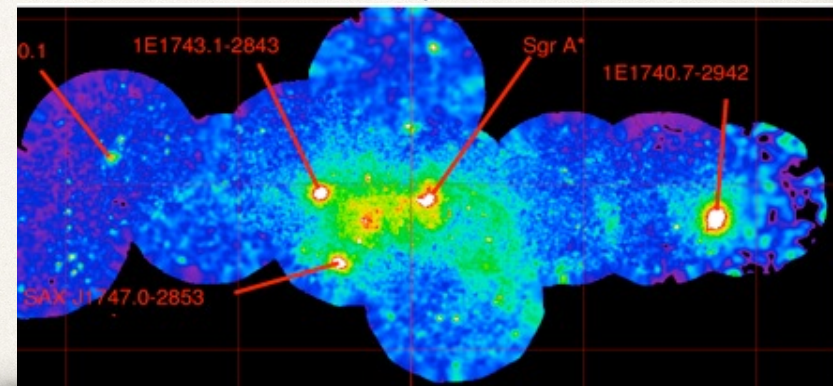
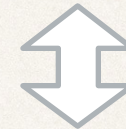
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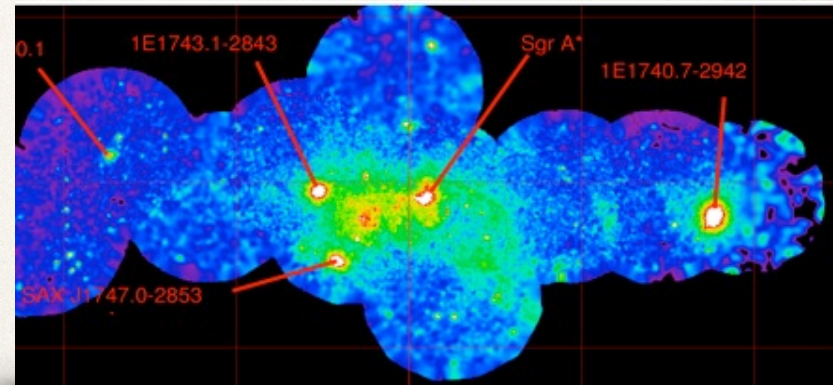
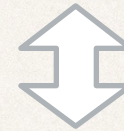
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- ♦ “Merge your own interests with an area that has still a lot of growth potential.”
- ♦ Find your style of work: Experimental work means teamwork within huge collaborations - data analysis is done in very small teams if not alone.



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- ♦ If you intend to work with hardware or software in astronomy - "stay close to the photons", don't get distracted by technical challenges.



Habit #1: Define and Follow Objectives

- ♦ Decide at the beginning of your postdoc where you want to be at the end and where you'll be going from there.
- ♦ Think about the steps to get there efficiently.
- ♦ Do you want to start teaching? (You should!)
 - ♦ Which topic(s)? Practical courses? Which Format?
- ♦ Do you want to supervise bachelor and master students? (You should, too!)
- ♦ Stay focused: don't get involved in the administration of software, computers, organisation of meetings or projects.
- ♦ Get others involved in your ideas, start your own collaborations.
- ♦ Apply for grants for your ideas, even if you're enjoying a comfortable postdoc and don't actually need the money.

Habit #2: Quickly Become an Expert

- ♦ Follow your heart and abilities in choosing the position
- ♦ Make your work a central element in life and enjoy it.
- ♦ Focus: Don't keep a plan B open or invest lots of time in other things
- ♦ Do your homework: Read papers, attend seminars and conferences to stay ahead
- ♦ Be proactive and surprise colleagues.
- ♦ Be a team player: once you are on a successful track, help others.

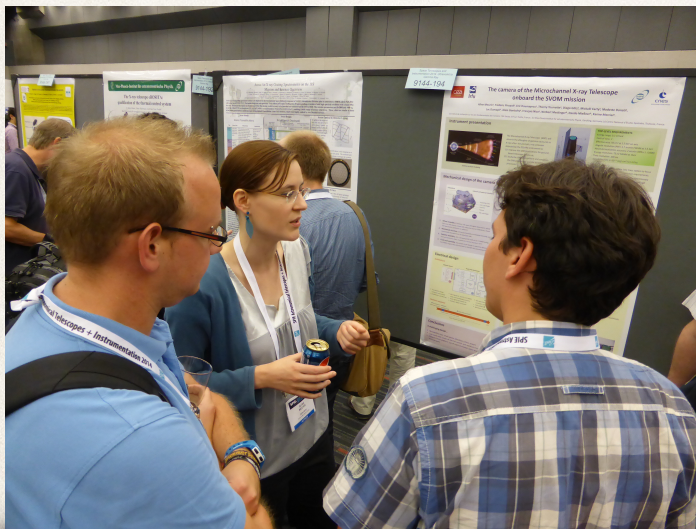


Habit #3: Finish at Least One Big Project

- ♦ Plan your research as a series of focused, completed projects.
- ♦ Define subprojects, delegate work to co-workers, get others to help, become more efficient, keep the big picture in mind.
- ♦ What might go wrong? Do you have back-up plans for your experiments / observation proposals? Seek advice from co-workers and supervisors.
- ♦ In a large collaborative project you might find young motivated PhDs, busy supervisors, retired experts, and other people. Instead of getting frustrated, try to maximize what they have to offer.
- ♦ “Finished” means “published”

Habit #4: Communicate Your Science

- ♦ Writing and publishing papers proves your capabilities and makes you a stronger job candidate for any prospective employer.
- ♦ Communicate your science to funding agencies (DFG, DLR, BMBF, ESA, ...) — there are many opportunities besides the official calls.
- ♦ Present your work whenever possible.



Habit #5: Establish Your Identity

- ♦ Become known for what you do; seek collaborations with others.
- ♦ Can your work be used by other projects as well?
- ♦ Go to talks and ask questions.
- ♦ Stand in the front row at conference pictures :-)
- ♦ Lunches and coffee breaks are the most important parts of meetings and conferences: use them for networking.

