

# 2<sup>ND</sup> WOMEN CAREER SYMPOSIUM IN PHYSICS



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@SPS ANNUAL MEETING

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**UNIVERSITÉ  
DE GENÈVE**

**FACULTÉ DES SCIENCES**  
Département de physique théorique



**With my group and several  
of my colleagues this January**

**(Two of the women are pregnant!)**



**My work consists in research - teaching - admin:**

**Research in theoretical cosmology:**

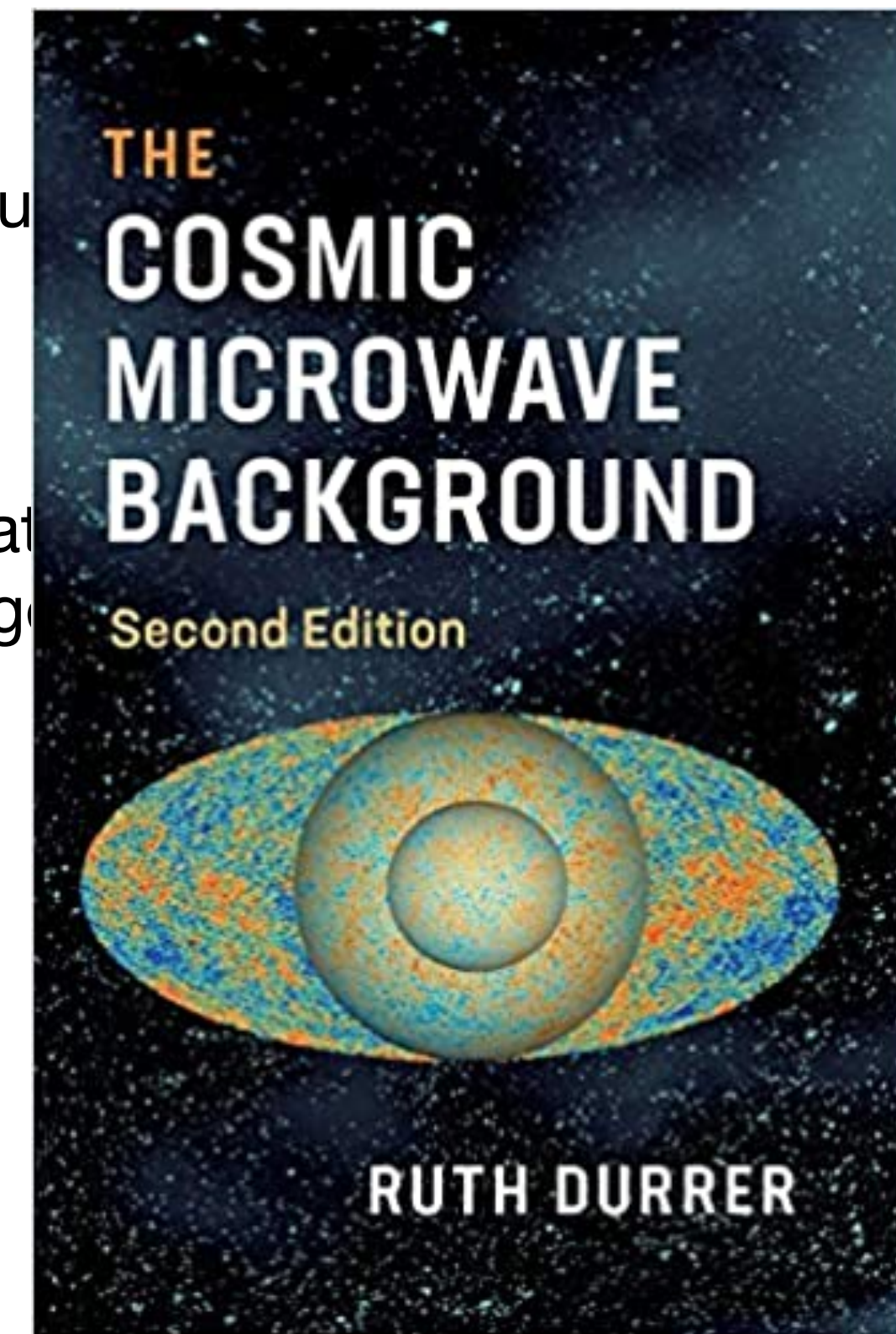
- Developing observables and discussing what we can learn from them about our Universe.
- Doing numerical and analytical calculations on what different cosmological models predict for these observables.
- **Examples:** CMB anisotropies & polarisation, cosmic magnetic fields, gravitational wave background, the cosmological large scale structure, gravitational lensing...

**Teaching:**

I really like teaching. Our undergraduates are all very strong, but most of them are good in physics and eager to learn.

**Administration:**

Let's not talk about it...



**Advice:**

Show your students/postdocs how much you **like physics!**

Keep **flat hierarchies**.

Keep a **collaborative spirit**. Not who had which idea first is what counts, but that we solve the problem together.

Let your students develop **their own ideas** and work on what they like best.

**How did I get there...**



I grow up on a farm in Kerns Obwald with my 4 sisters.

We all loved maths and we were really good at it.

My parents did not know what physics is, but after my first physics lessons, where I learned that all matter is made of atoms I knew I want to learn more about this...



**Advise:**

Never think you are not 'cut out' for Academia, follow your dreams.



I studied theoretical physics at Zürich University where I also did my PhD under the supervision of **Norbert Straumann**. During this time my sons, Florian and Melchior were born.

All this was only possible due to the support of my partner, the painting artist **Martin Zimmermann**.



After my PhD I did a first postdoc position. I met amazing and supportive colleagues and competition.

Before leaving Switzerland I met my partner.

After Cambridge our daughter was born.



... and then a second postdoc in Princeton, USA



**Advice:**

You need **people who support you**, men or women.

Having **children early on is possible**...

**Do not get discouraged** by unfair 'collaborators' and other difficult facts of life.

Stay more **interested in the physics** itself than in 'what do I need to get credit for'.

After my stay abroad I went back to Zürich.  
First as a postdoc hired by Norbert Straumann,  
then I got one of the first SNSF assistant professorships also at Uni ZH.

This was the time when I seriously believed I might actually  
become a physics professor.  
I applied at many places in CH and elsewhere and after three years,  
in 1995, I obtained a full professor position in the theoretical physics  
department (DPT) at Geneva University.

The director of the DPT at the time, Jean Pierre Eckmann,  
told me during the interview:

**“If we don’t offer the position to you,  
don’t think it is because you are a woman.  
But if we offer it to you, also  
don’t think it is because you are a woman.”**

Cosmology was a totally new field for the DPT...





I now could build my own group.  
Initiate a new field at Geneva University.

I did not very much think about it but just started to  
search for funds to hire excellent people.

Of course I also kept collaborating with my friends  
all over the world outside of Geneva University.



**Advice:**

**Try to collaborate with nice people only, it is so much more fun!**

- At present the Geneva cosmology group consists of more than 40 researchers and graduate students (6 professors).
- I think it is fair to say that this is one of the strongest groups in this field worldwide.
- Of course this is not mainly my doing, the fact that this field is very active and attracts many really excellent people is most important.
- But I think the fact that we have an amazing atmosphere which is supportive of women and also of men who prefer collaboration over competition, was always my first priority, and I am convinced it is much more productive than cockfighting.
- **My conclusion : Women do not have to become like men to be successful in Science. Maybe sometimes men should try to fight their ‘testosterone poisoning’ which does not advance anything.**

Since August 1, I am now retired.

I enjoy a more leisurely path, but still keep doing research with my friends and some students.

But I have also more time also to look after my sweet grand children.

**Sacha**



**Alexis with Martin**

