

LHC CAREER NETWORKING EVENT

# ADAPTING YOUR CV TO THE INDUSTRY

Cécile Deterre

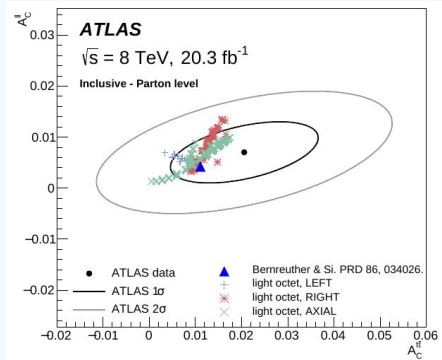
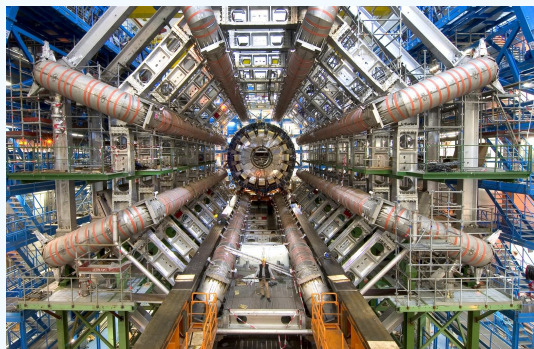
NOVEMBER 21ST 2022



**Contact**

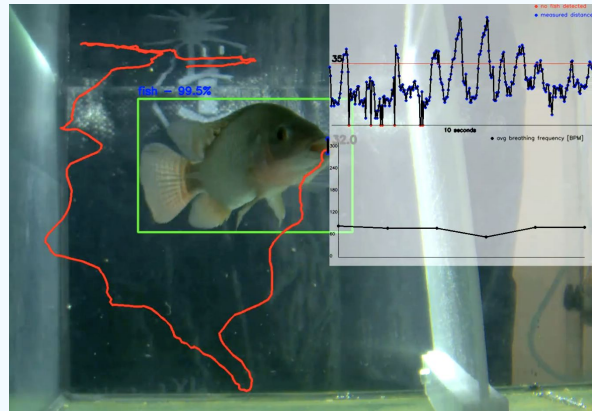
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[LinkedIn alumni.cern](https://www.linkedin.com/company/alumni.cern)



Post-doc  
in particle physics

📍 DESY Hamburg, Germany  
ATLAS



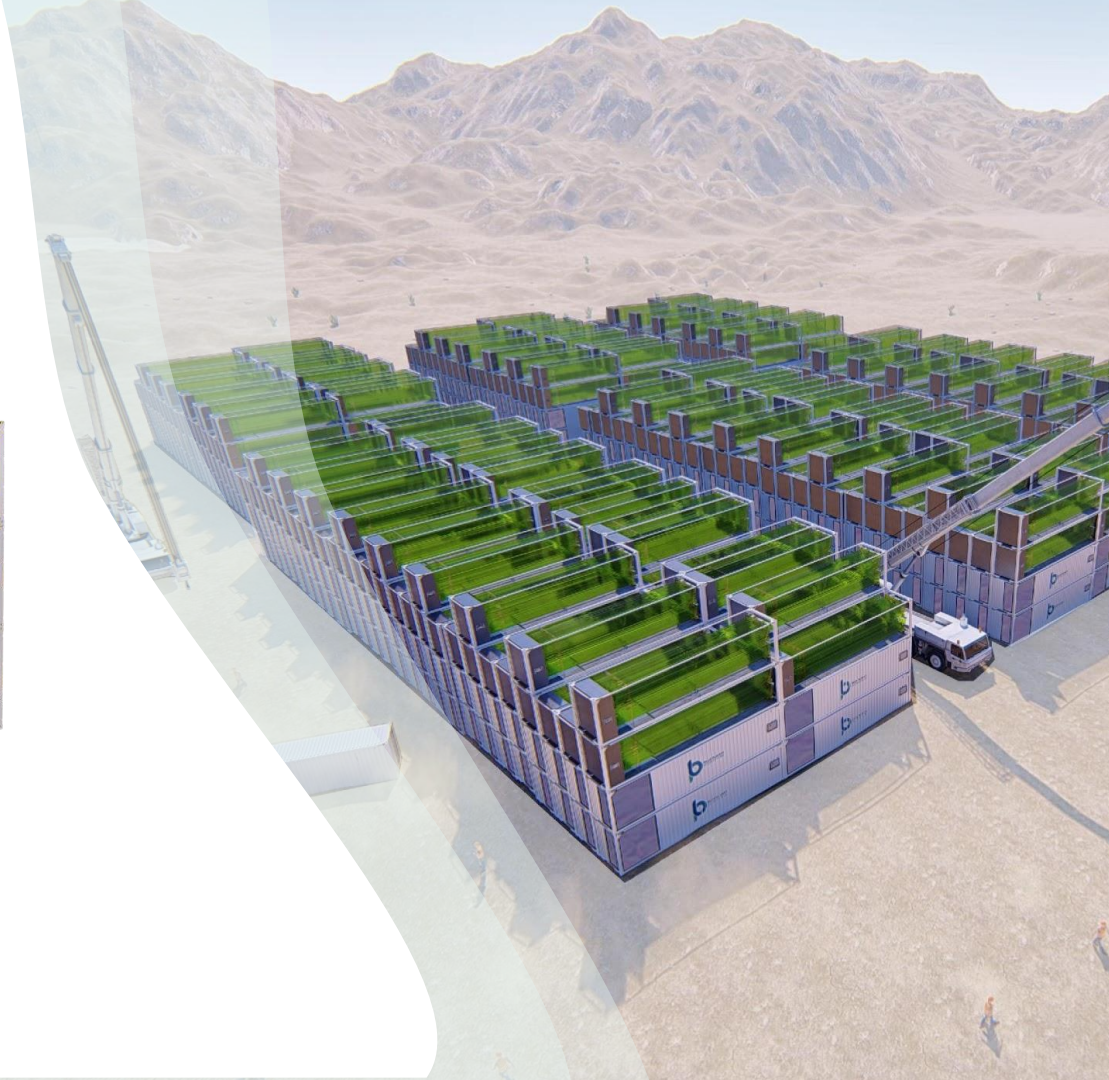
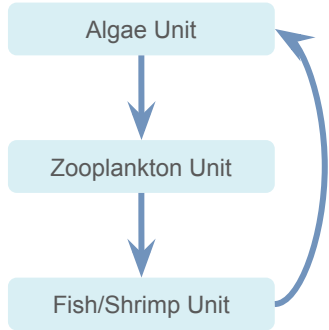
PhD  
in particle physics

📍 CEA Saclay, France  
DO + ATLAS

Blue Planet Ecosystems

📍 Vienna, Austria

# Blue Planet Ecosystems



# Preparing your application - first advice

- Think about who will read your CV
- Explain clearly what you would bring to the company
- Adapt your CV to the position



# Version 1: academic CV

## Post-doc in ATLAS

- Search in the top sector in a final state with same-charge leptons and  $b$ -jets, sensitive to signatures with 4 tops and vector-like quarks
- Study of properties of top quark pairs: tt asymmetry and top quark polarization measurements in the dilepton channel with 7 and 8 TeV data.
- Development of an ultrasonic flow meter and gas analyzer for the ATLAS inner detector
- Work on the simulation for the high luminosity upgrade of the LHC
- Control room shifts (Data Quality)
- Convener of the Top Properties subgroup in ATLAS (November 2014 – November 2015): responsible for around 20 analysis groups
- List of papers, PhD students, ...

→ concise and technical

→ not understandable for anybody outside of particle physics

# Version 2: industry CV

**Post-doctoral researcher** at Deutsches Elektronen-Synchrotron (Hamburg, Germany)

*Particle physicist investigating the top quark properties at the ATLAS experiment at CERN (Geneva, Switzerland)*

- Cleaned, analyzed and interpreted large datasets from particle collision events from the LHC at CERN
- Developed a monitoring tool with WinCC for the cooling system of the ATLAS detector resulting of early detections and prevention of coolant

technical  
competencies

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- Published 6 articles in high-impact journals as lead contributor in collaboration with international teams ranging from 5 to 30 researchers
- Presented at four international conference and >10 invited seminars, national and major internal meetings with audiences of >100
- Selected as a member of an editorial board (internal reviewing authority) at the D0 collider experiment, reviewing ~10 publications for high-impact journals

scientific communication:  
show its level and impact

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- Mentored and supervised 4 PhD and 4 master students, structuring daily work, and providing training and problem solving
- Coordinated a group of 15 research teams, by reviewing results, providing feedback and overall guidance on their work

leadership and  
management



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- Coordinated a group of 15 research teams, by reviewing results, providing feedback and overall guidance on their work

→ understandable but very long

# Version 3: the CV you send!

**Researcher** at DESY (Hamburg, Germany)

*Particle physicist at CERN (Geneva, Switzerland)*

- Cleaned, analyzed and interpreted large datasets from the Large Hadron Collider at CERN
- Published 6 articles in high-impact journals
- Coordinated a group of 15 research teams
- Mentored and supervised 4 PhD and 4 master students
- Selected as a member of an editorial board at the D0 Collaboration
  
- **Achievements:**
  - I increased the speed of an algorithm by 80%
  - I selected a signal in a background of  $10^6/1$
  
- **Technical expertise:**
  - programming: Python, C++, ...
  - machine learning techniques: ...
  - data analysis tools: ...

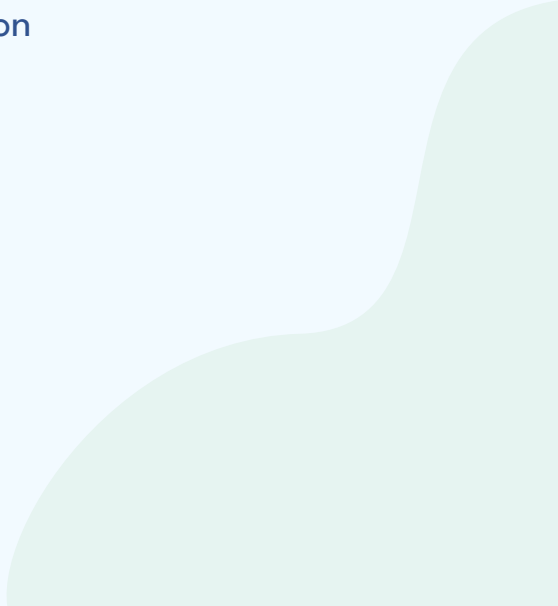
- recruiter can read it in 30s
- tangible business relevance
- guideline for (future) discussion

# Version 3: the CV you send!

## Things you might consider adding:

- an **introduction** at the top of your CV:  
“I am a data scientist and former particle physicist with strong experience in...  
My goal is to apply my expertise to ... I highly enjoy ...”
- a list of **certifications** or **courses**: shows your motivation for the new field
- Link to **external sources**:
  - networks: LinkedIn, alumni.cern
  - papers: inspire, thesis/dissertation, ...
  - code: GitHub, ...

# Key tips

- Ask somebody outside of CERN to review your CV:
    - do they understand what you wrote?
    - if not, you need to reword things
  - Call HR person from the company you apply to, follow up on your application
  - Practice makes perfect!
- 

# Key tips

- It will take a lot of applications to get to your dream job
- Normal to send 100 applications:
  - send one application before lunch and one before dinner
  - that's your next 3 months! :)
- See this as an opportunity to see what's out there:
  - you learn about new companies
  - get to talk to many different people
- Talk to your network, let them know you're looking for a job:
  - university, CERN alumni, 1st and 2nd connections on LinkedIn
  - don't be shy, a huge share of jobs are found via networking

# THANKS FOR YOUR ATTENTION

Don't hesitate to contact me if you have questions!

## Contact

[cecile.deterre@gmail.com](mailto:cecile.deterre@gmail.com)

[LinkedIn alumni.cern](#)

# Additional thoughts: recruiter's point of view

- Think about who will read your CV:
  - it must be easy to follow
  - keep it clean and simple: no fancy fonts, colors, ...
  - start with the most important experiences (usually the last)
  - avoid information overload: select the most important points for that position
  - know the local rules: picture or not, date of birth, ...
- Explain clearly what you would bring to the company:
  - summarize your expertise and achievements
  - connect it to the job → choose the right keywords
  - “translate” the specific positions/tools/experiences
- Adapt your CV to the position, example:
  - in some fields, listing some of your papers might make sense
  - in others you can mention that you wrote papers and simply add a link to your inspire profile

# Scientific communication

- Scientific communication brings a lot of value:
  - methodology
  - transparency, open communication, ...
- Research vs industry:
  - big part of our work in academia
  - not common in many industries
- Explain what it meant in your daily work, eg:
  - regular reports in front of management team
  - outreach, public talks, ...



# Leadership and management

- Show that you can share knowledge and teach others:
  - did you supervise students?
  - did you teach at university?
  - public outreach?
- If you had responsibilities within a collaboration/lab, explain what it means, eg:
  - coordinated a research group/project
  - supervised summer students/interns