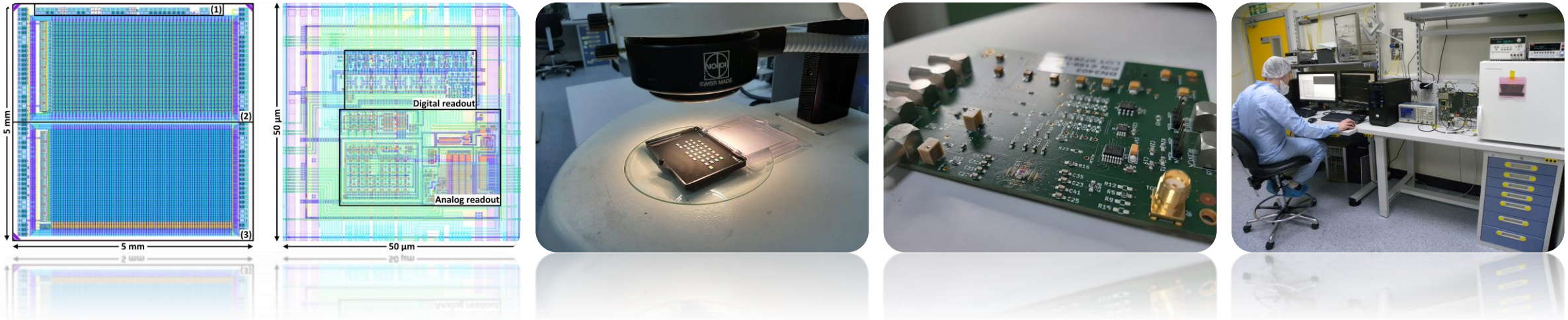
UKRI FLF



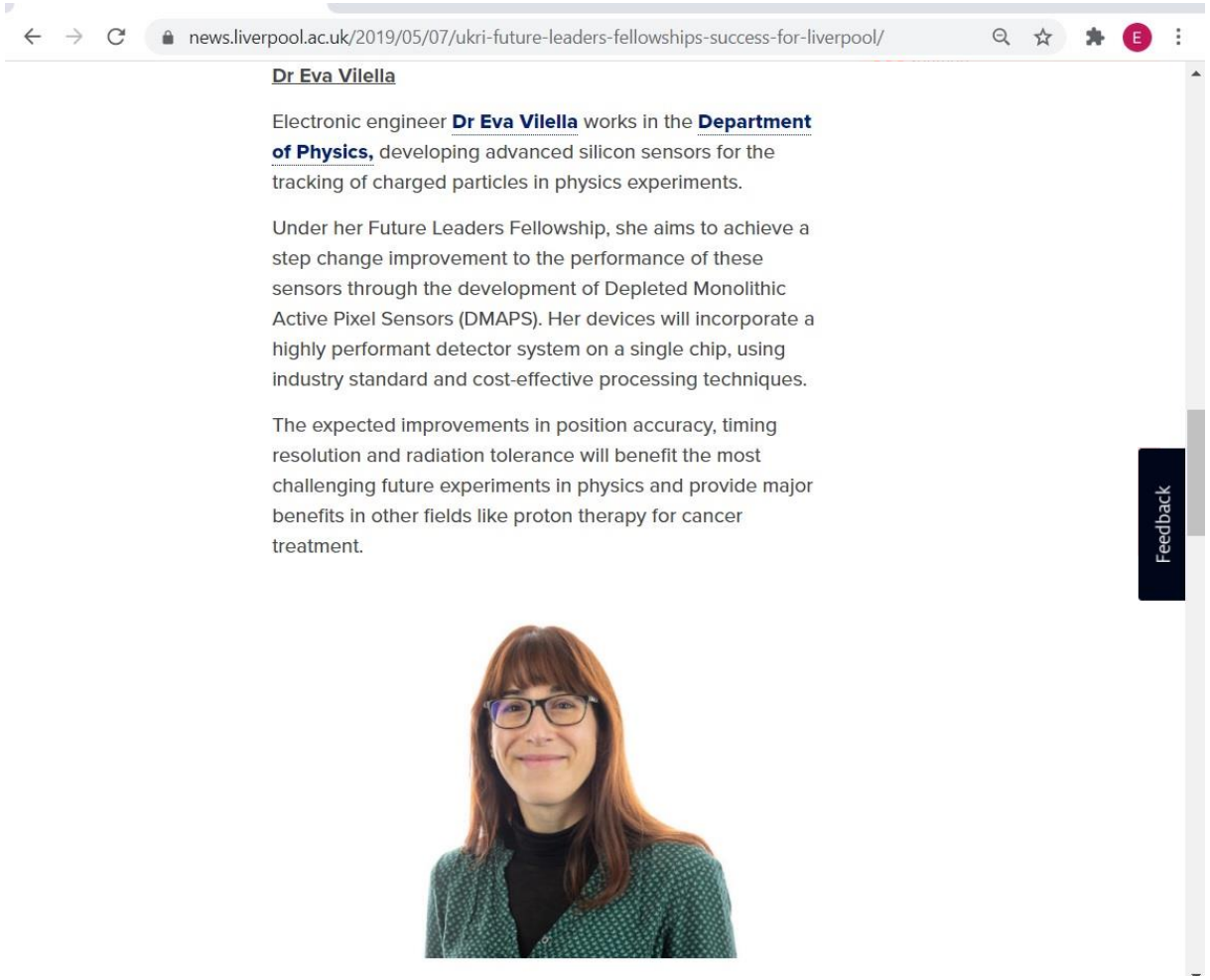
Dr Eva Vilella-Figueras

UKRI Research Fellow

University of Liverpool

vilella@hep.ph.liv.ac.uk

UKRI Future Leaders Fellowship



UKRI Future Leaders Fellowship

What?

- Prestigious and exciting new fellowship scheme

UKRI Future Leaders Fellowship

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When?
- Funding for up to seven years on a 4 + 3 basis

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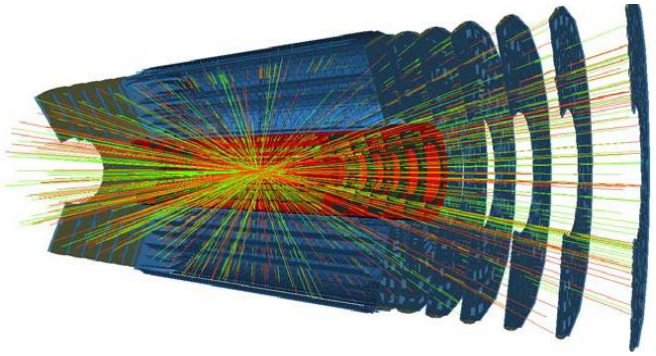
!!!
- Provides a route to an open-ended contract within academia

My fellowship – R&D goals & areas of expertise



Future particle tracking applications

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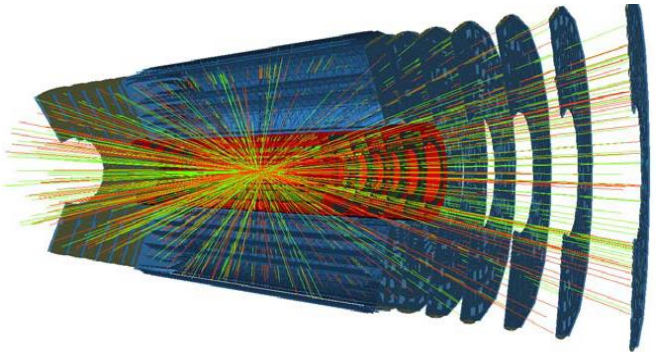

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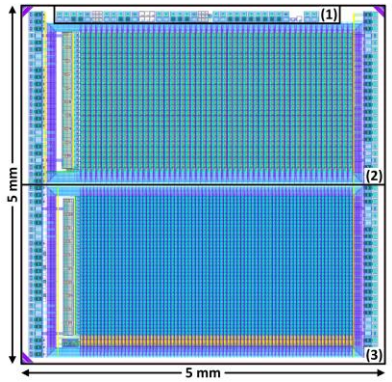

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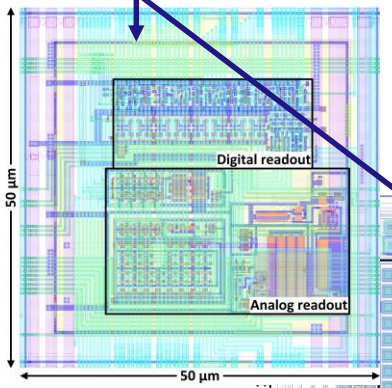

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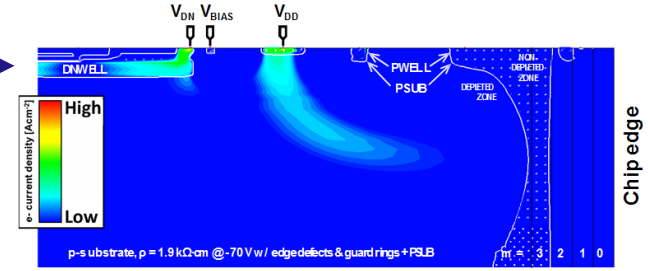

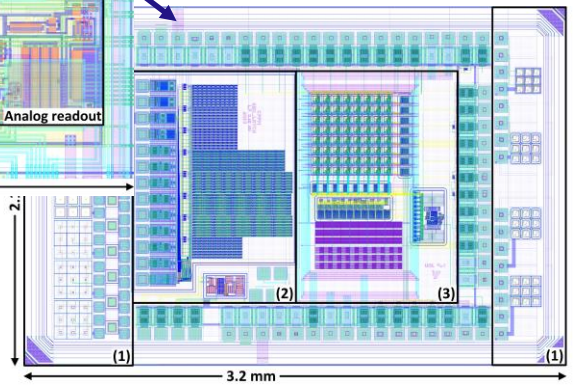

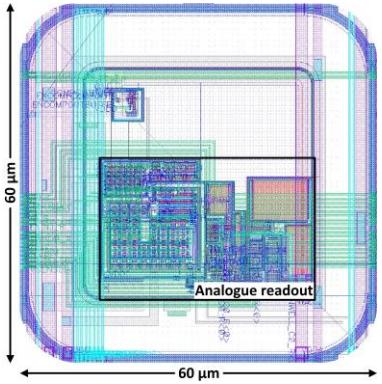

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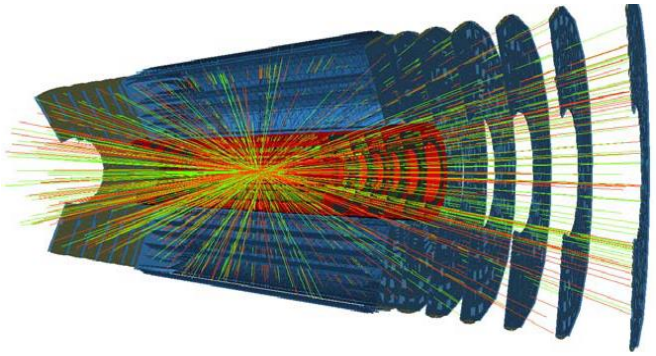

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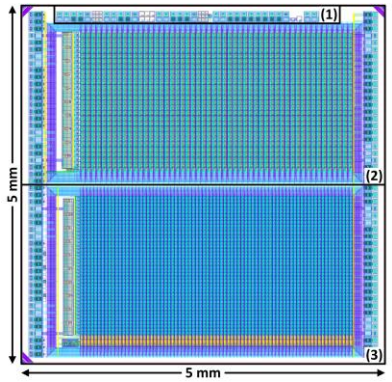

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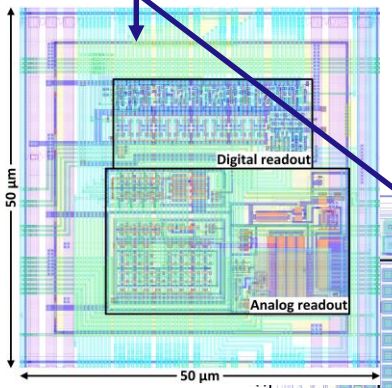

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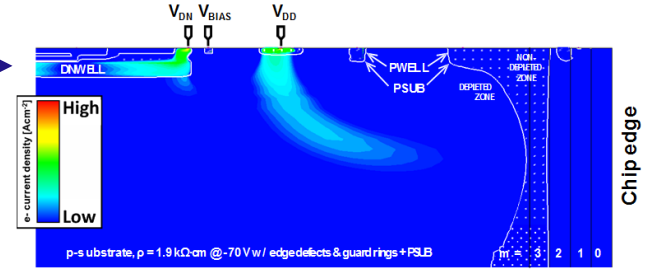

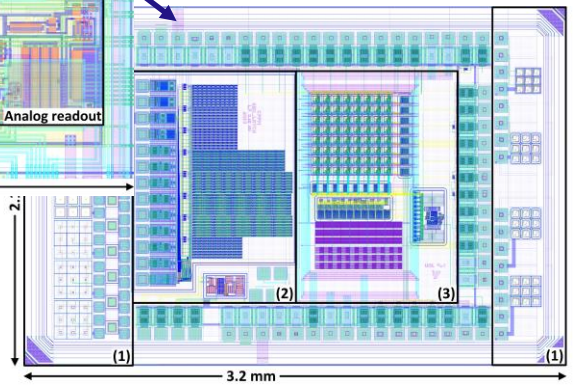

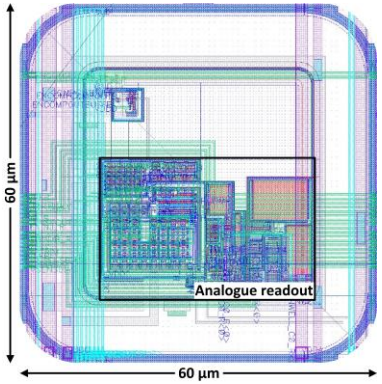

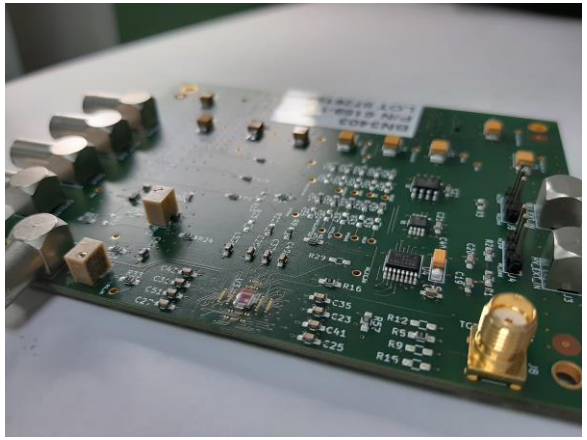

DAQ development

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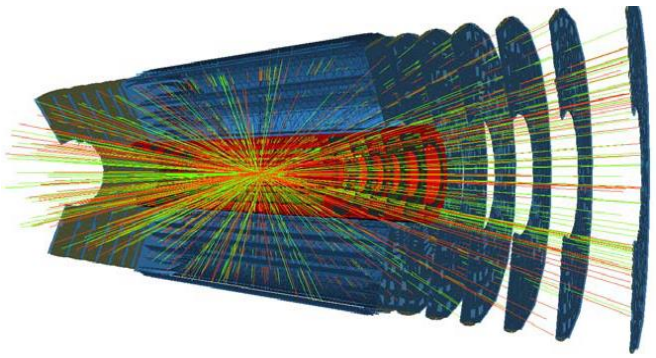

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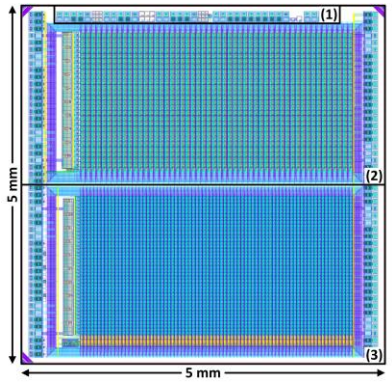

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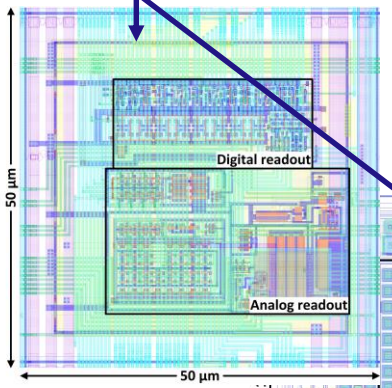

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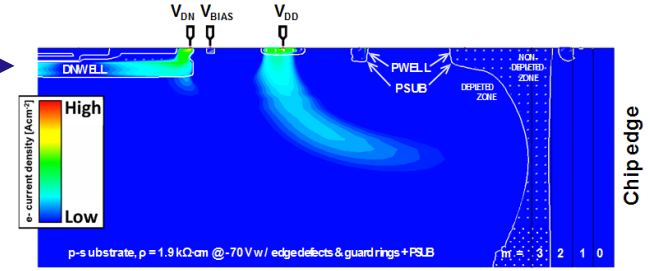

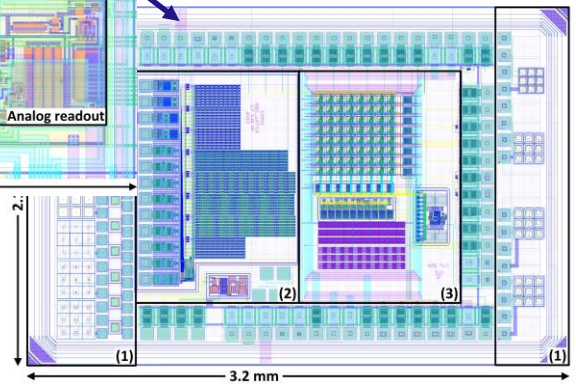

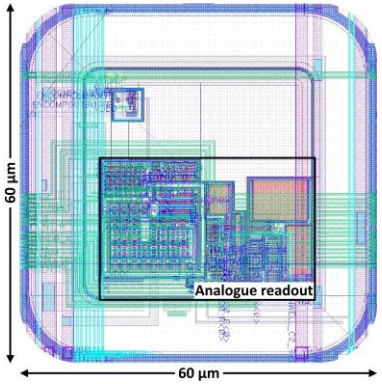

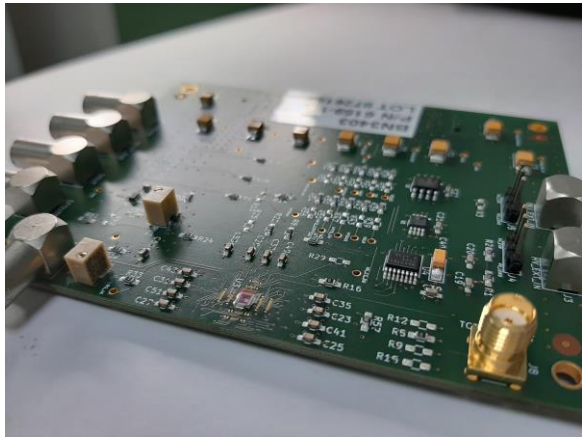

DAQ development

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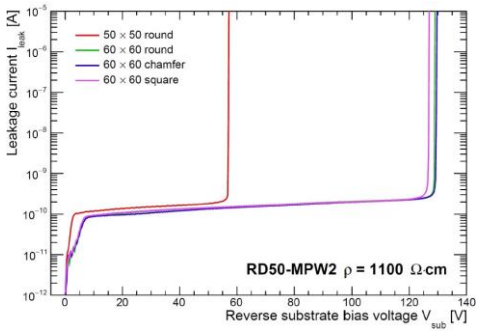

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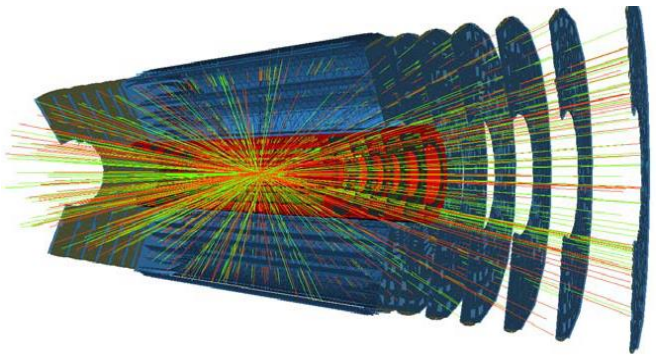

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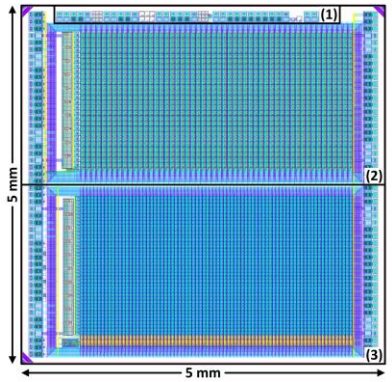

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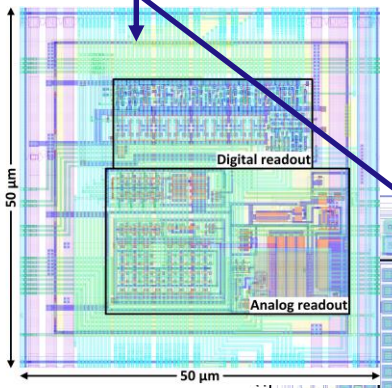

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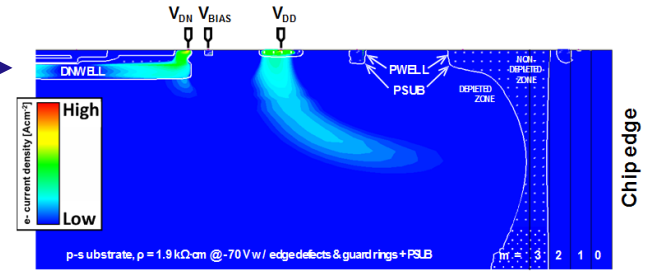

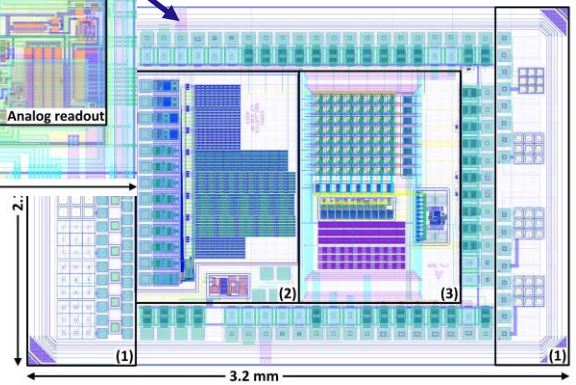

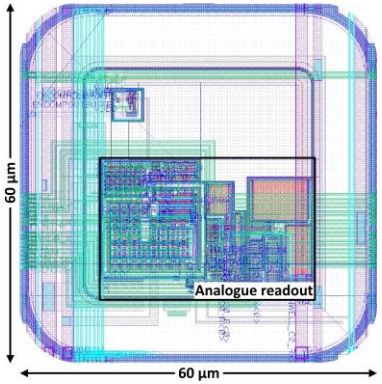

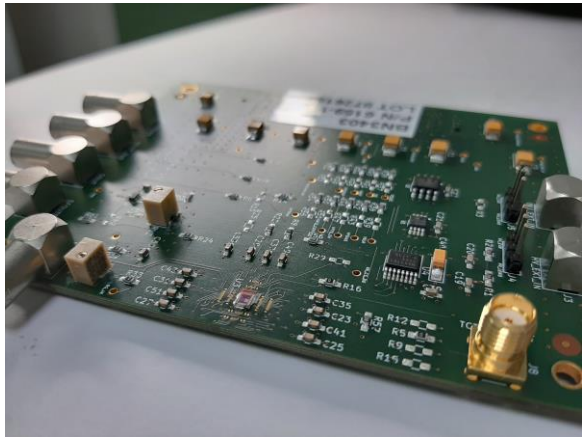

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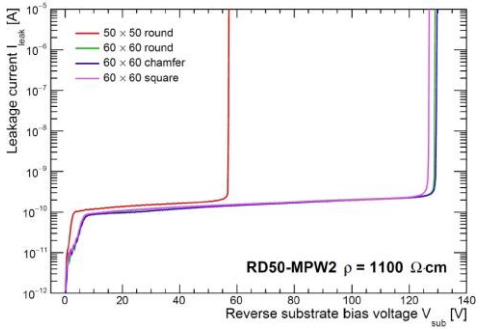

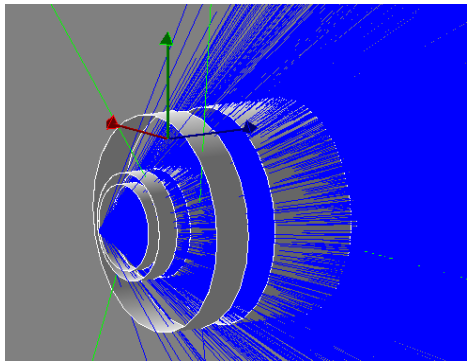

Geant4 simulations

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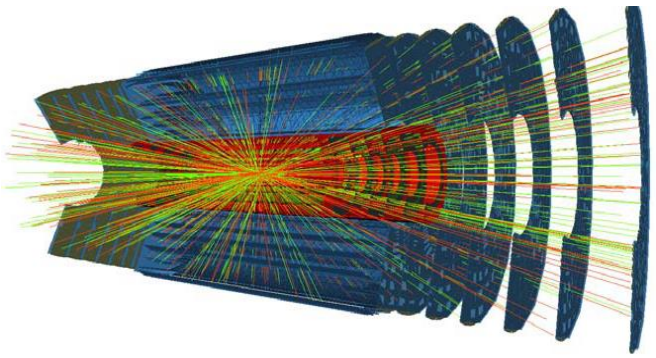
TCAD →



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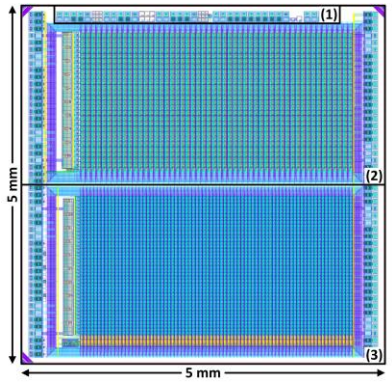
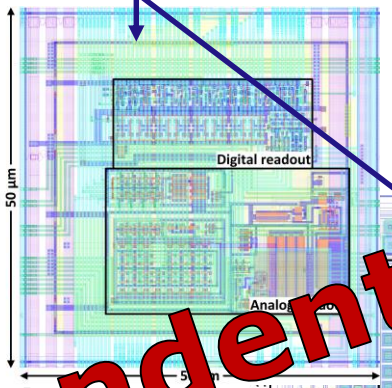
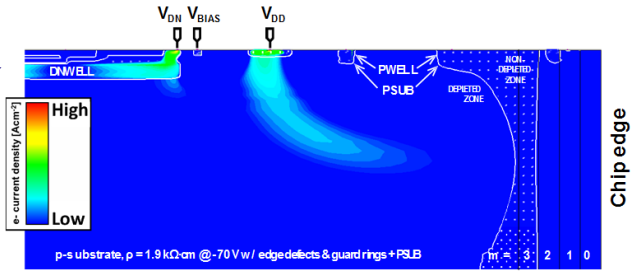
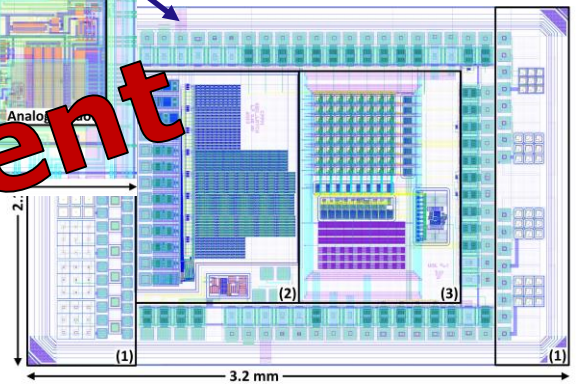
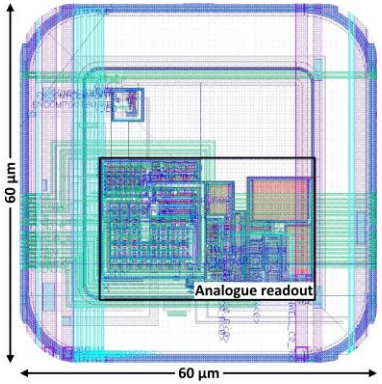


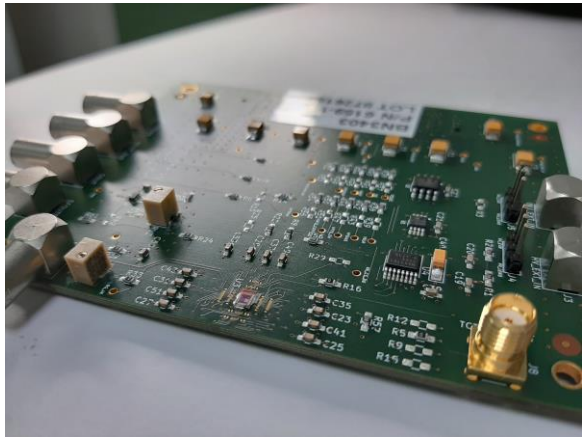








Independent R&D



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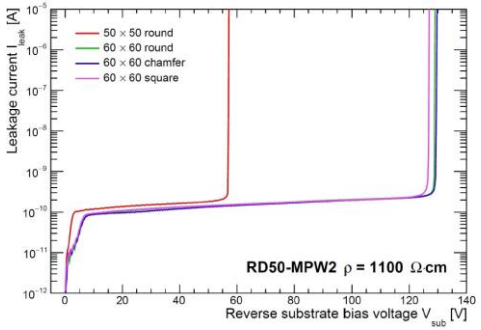

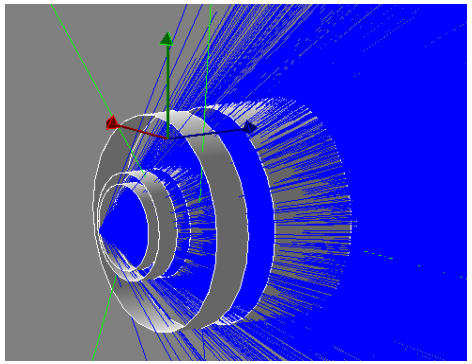

Geant4 simulations

My fellowship – Team

- Myself
- 2 postdocs
- 1 electronic engineer

} Fellowship funded

- 5 PhD students
- Occasional undergraduate students & summer students

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Europractice representative for Uni Liverpool

R&D representative for Particle Physics cluster

2020 LHCb MightyPix co-coordinator + LHCb-UK MightyPix sub-WP lead

Early Career Researchers representative for Department of Physics

Panel Member for UK funding agency for physics

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I am… – A more personal approach

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More patient

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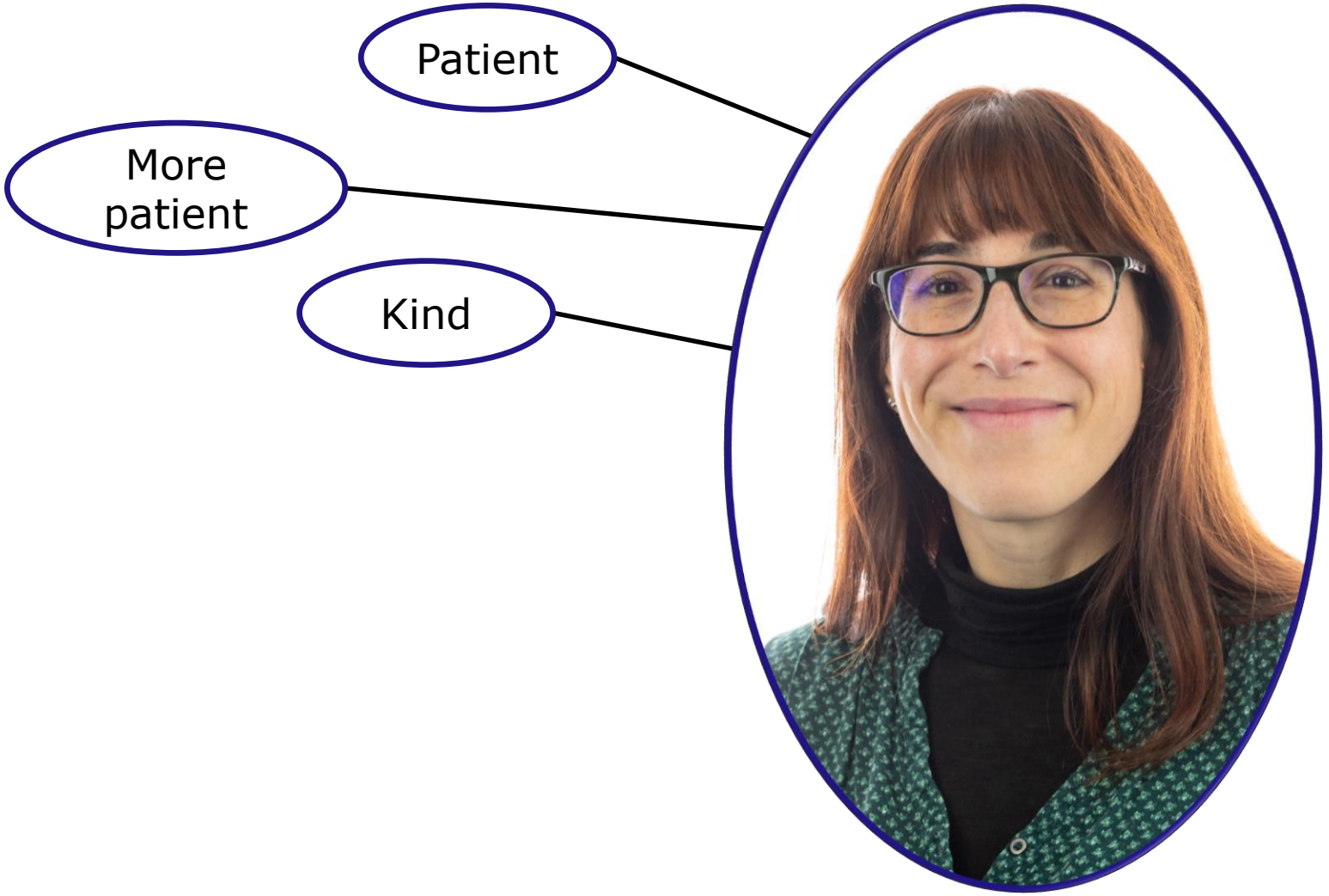

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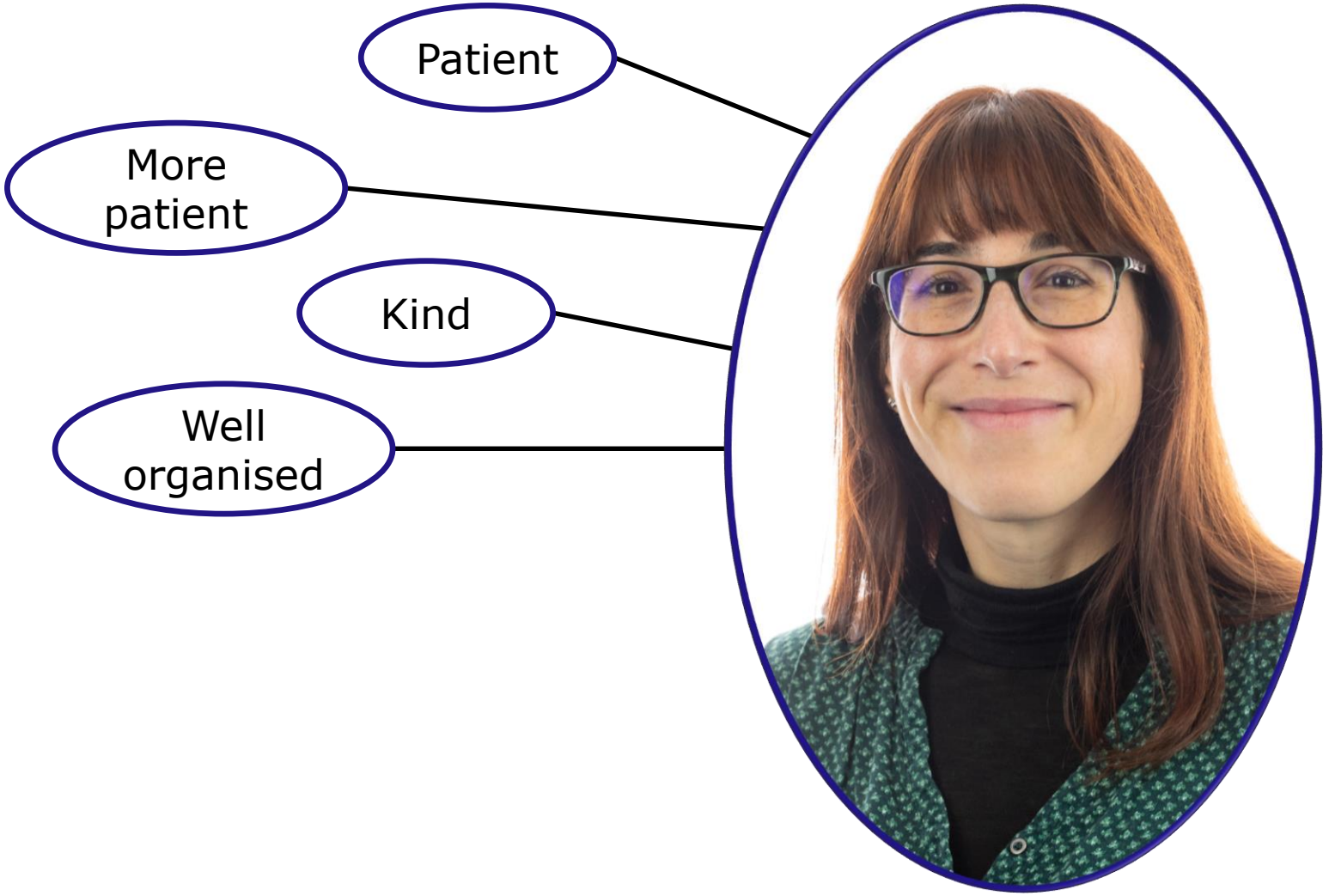

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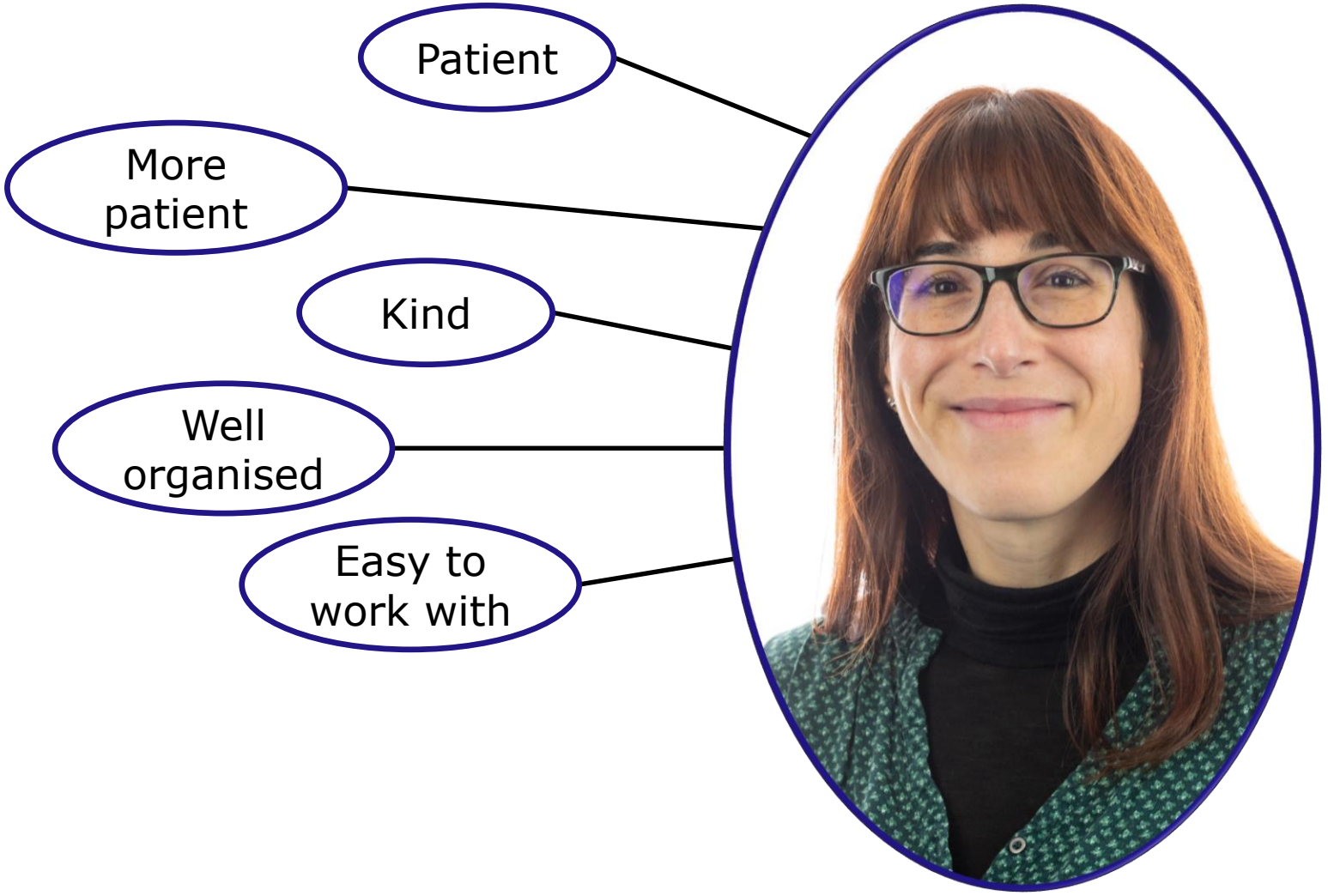

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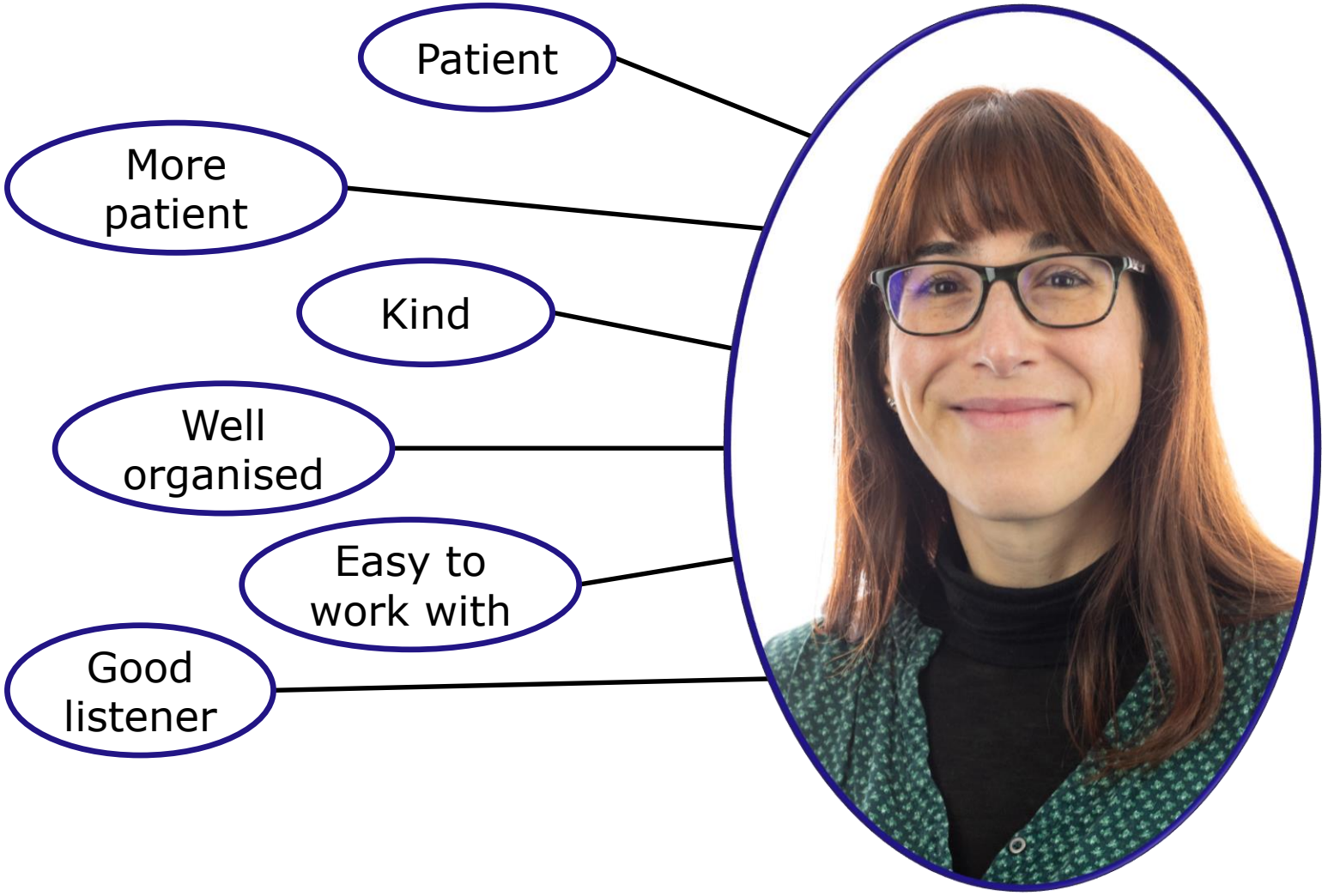

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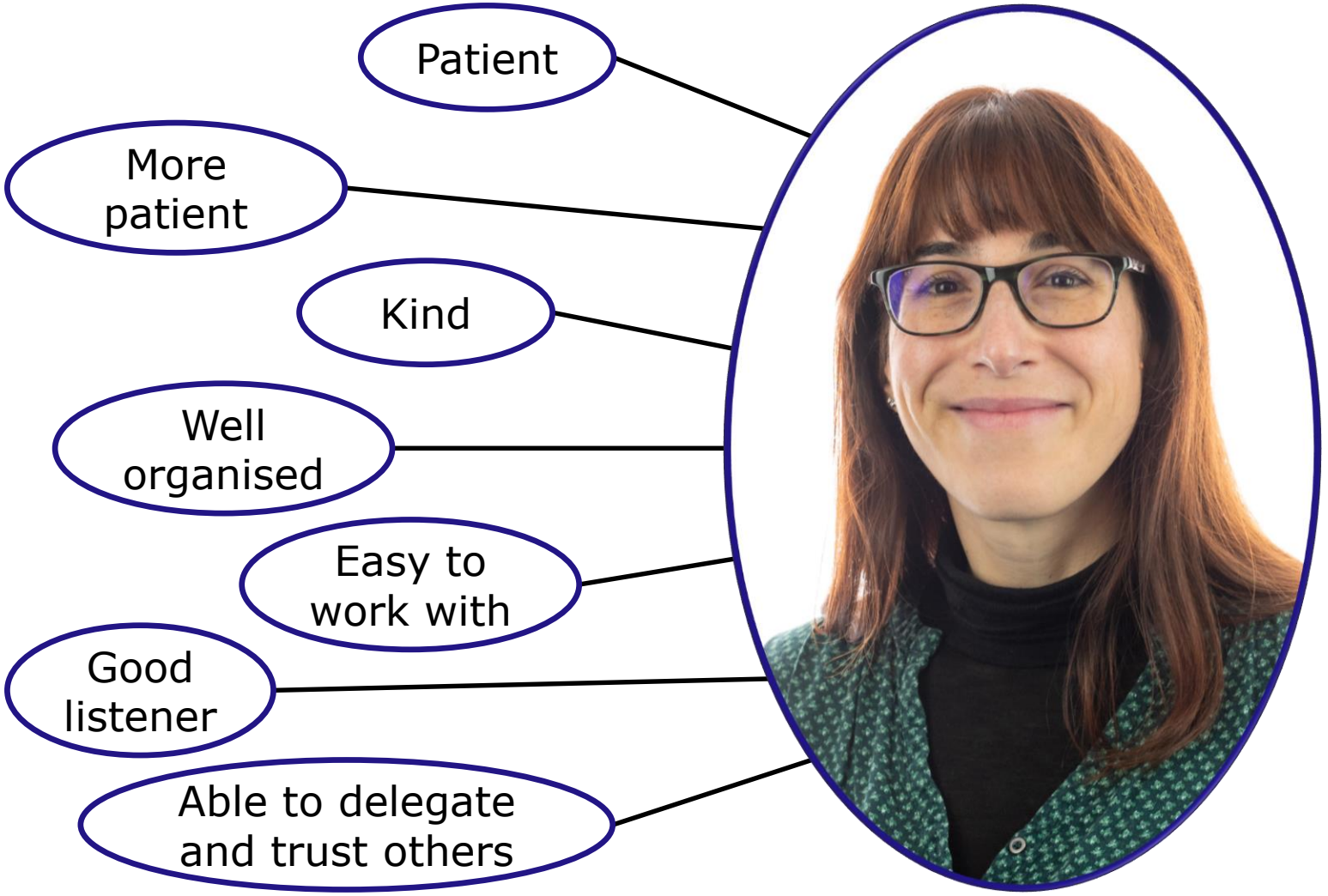

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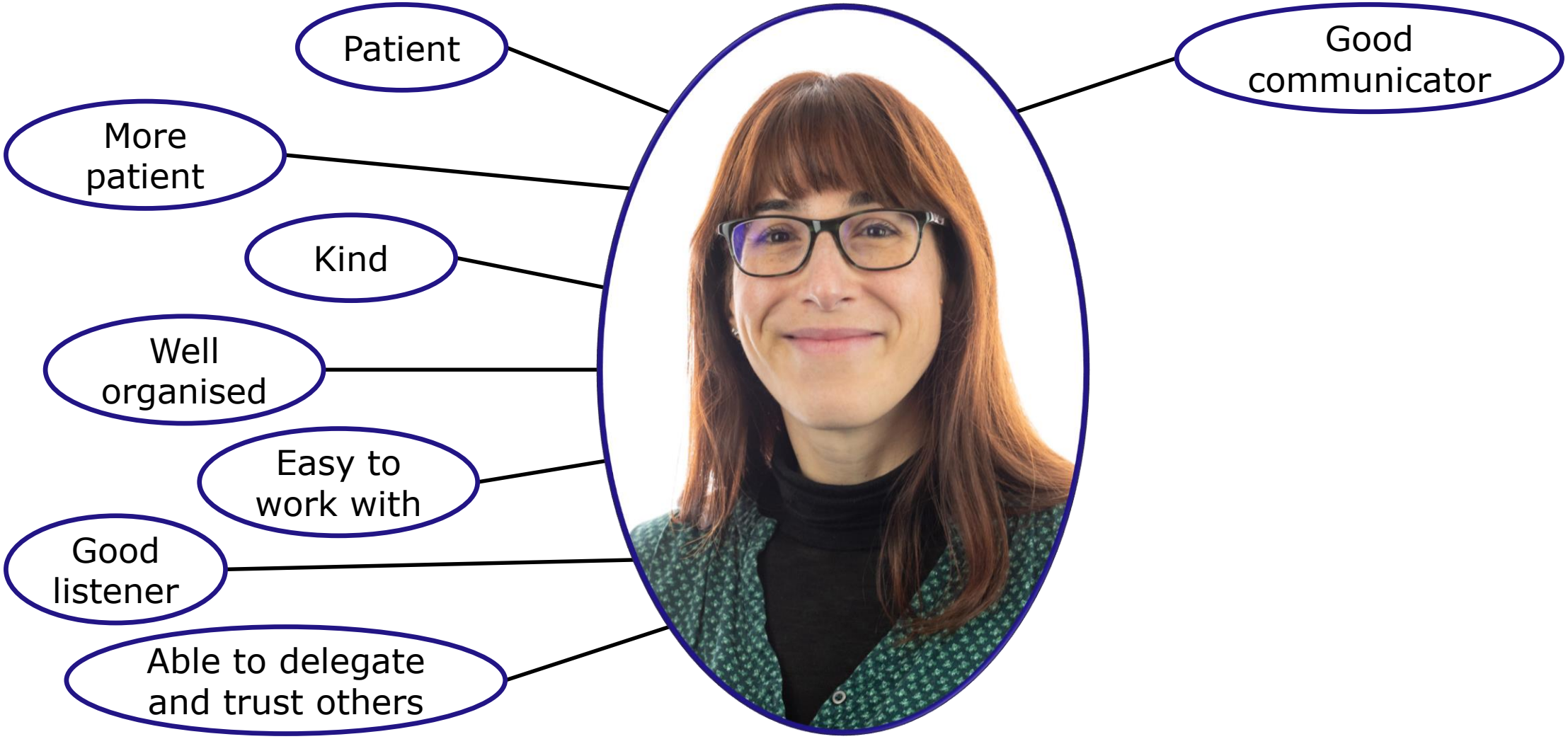


I am… – A more personal approach

Patient

More patient

Kind

Well organised

Easy to work with

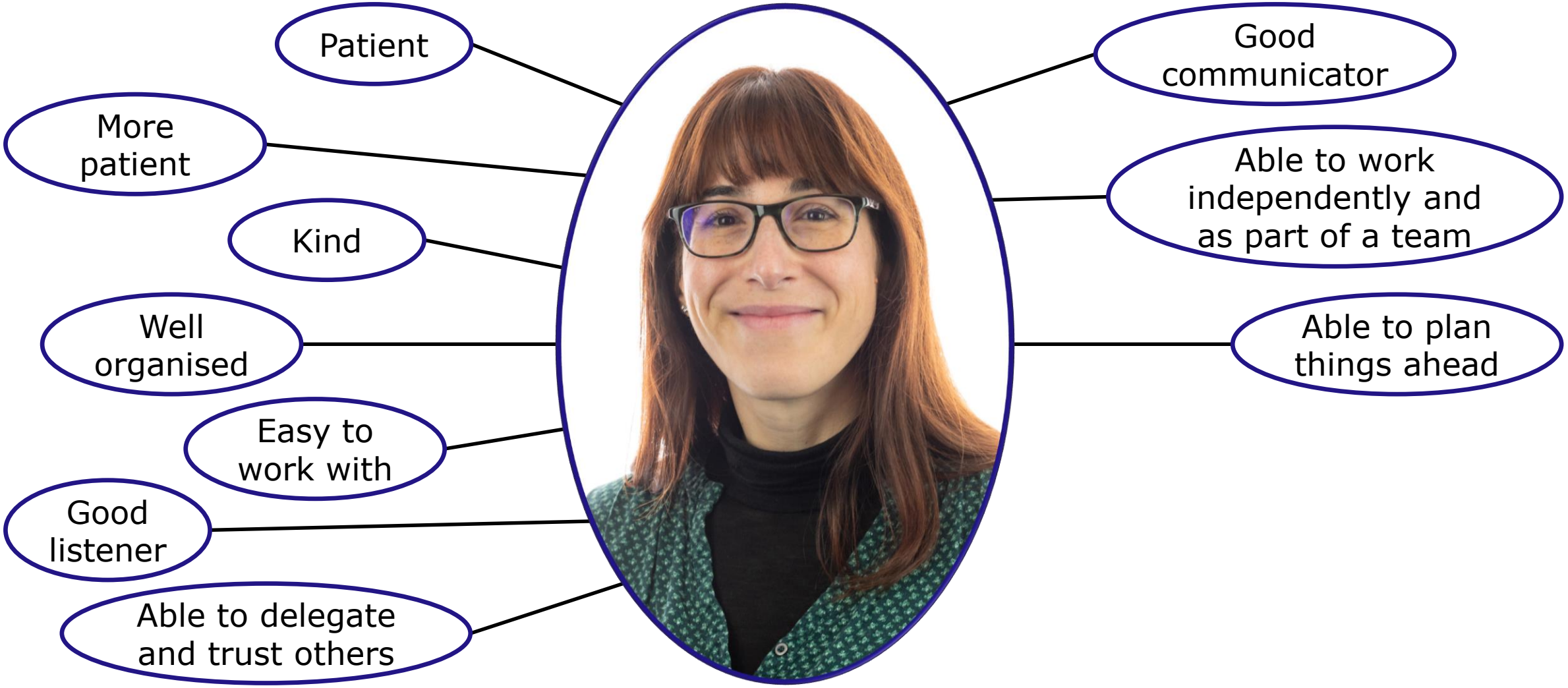
Good listener

Able to delegate and trust others

Good communicator

Able to work independently and as part of a team

I am… – A more personal approach



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Able to delegate and trust others

Good communicator

Able to work independently and as part of a team

Able to plan things ahead

Positive and enthusiastic about things

Able to take decisions

My fellowship – Expectations

My fellowship – Reality

My fellowship – Reality

Recruiting is hard:
Lack of people with the right knowledge and expertise

My fellowship – Reality

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Lack of people with the right knowledge and expertise

New PhD students need training

Newly recruited postdocs need training

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Preliminary measurements do not go like expected

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Discontinuation of software licenses –computer services people on annual leave

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Newly recruited postdocs need training

My fellowship – Reality

Foundries where I fabricate my custom-designed silicon sensors do not agree to produce my sensors like I would like them to

Preliminary measurements do not go like expected

Recruiting is hard:
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My fellowship – Reality

Unable to get agreement with international collaborators

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Preliminary measurements do not go like expected

Recruiting is hard:
Lack of people with the right knowledge and expertise

Delay in technical programme

Discontinuation of software licenses –computer services people on annual leave

New PhD students need training

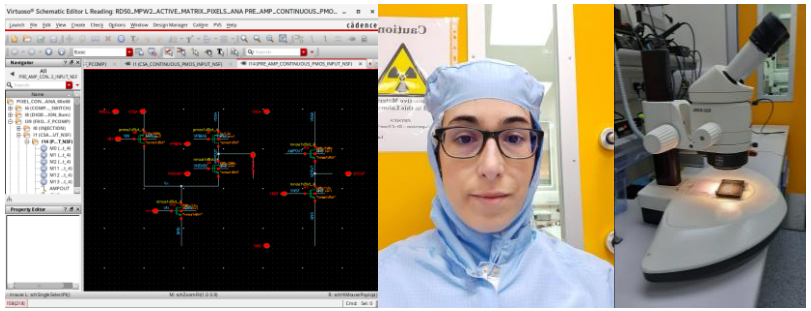
Newly recruited postdocs need training

My role as a PI – Day 1

My role as a PI – Day 1

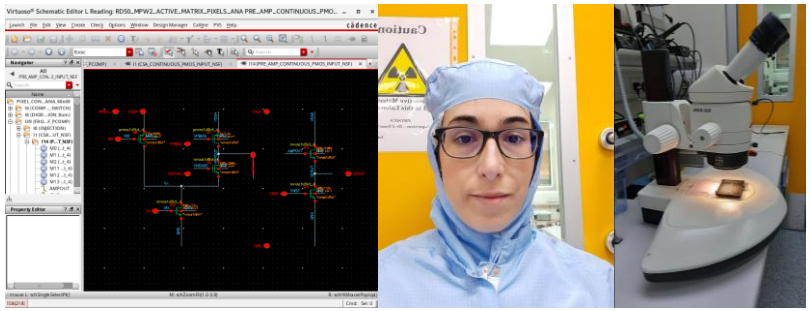
- I was the same exact person as before, with the same skills
  - yet I had a completely new role
  - and very different professional responsibilities!

My role as a PI – After 18 months



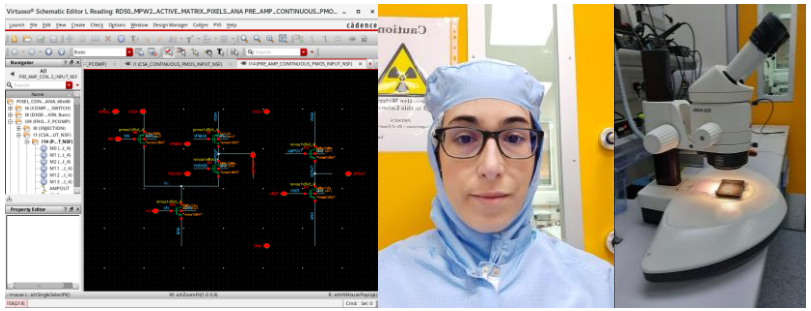
- Being a PI means having less time to
  - Do sensor design
  - Do sensor measurements in the lab
  - Read and write papers

My role as a PI – After 18 months



- Being a PI means having less time to
  - Do sensor design
  - Do sensor measurements in the lab
  - Read and write papers
- But needing to spend a significant amount of time
  - Dealing with paperwork (contracts, purchases, etc.)
  - Managing postdocs/engineers + supervising students
  - Sorting things out (meetings + emails)

My role as a PI – After 18 months



- Being a PI means having less time to
  - Do sensor design
  - Do sensor measurements in the lab
  - Read and write papers
- But needing to spend a significant amount of time
  - Dealing with paperwork (contracts, purchases, etc.)
  - Managing postdocs/engineers + supervising students
  - Sorting things out (meetings + emails)
- Planning, developing relationships and making impact
  - Strategy to achieve my R&D goals
  - Developing relationships with collaborators + industry
  - Make things happen at a larger scale

Thank you for listening

If you have any questions, I will be happy to take them