



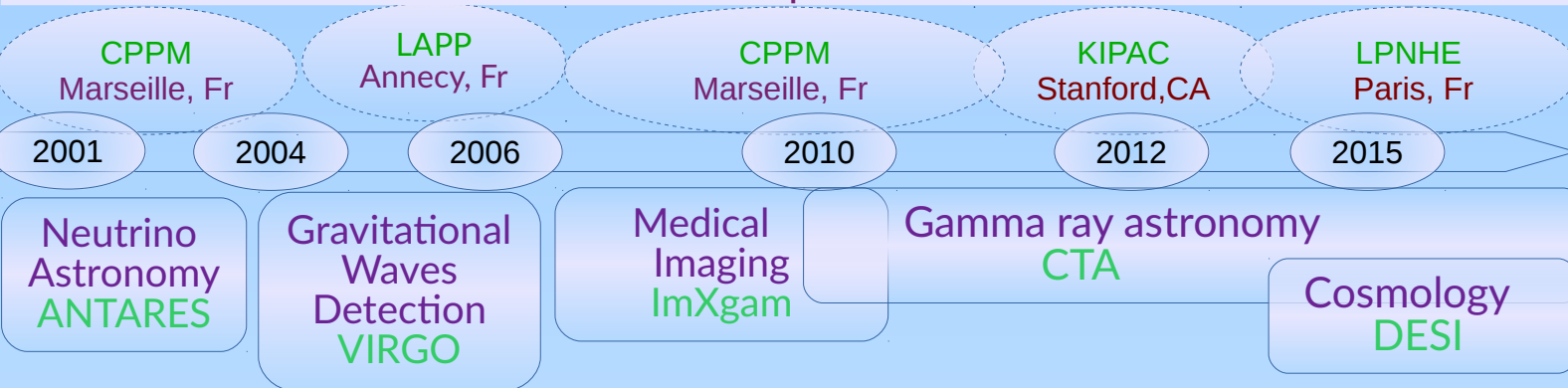
Sonia Karkar

Instrumentation  
Research engineer



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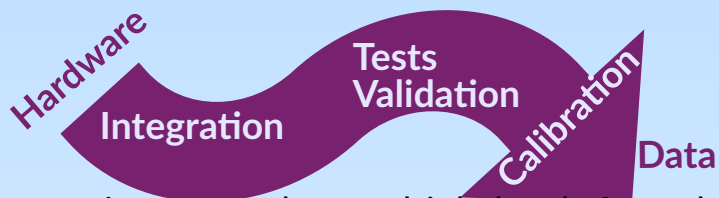
## Work experience



## Skills

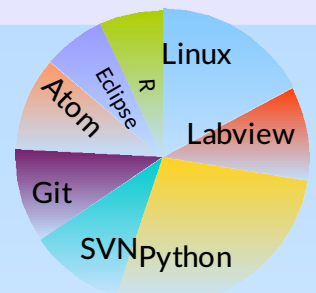
### Instrumentalist in experimental high energy (astro)physics

I work on the development of unique scientific instruments.



I appreciate to work at multiple levels from the **hardware** to the final **data**, interacting with scientists, engineers and technicians. I also find fulfilling to be able to work within **international collaborations**.

### Computing



Data analysis	Numpy, Matplotlib, Pandas
Data Acquisition	PyQt, socket, SCPI
Machine Learning	Sklearn

## Achievements

- On the **ClearPET/XPAD** project, I have co-supervised the **PhD thesis of Stan Nicol**. In 2009, we demonstrated the **feasibility of simultaneous PET and CT tomography**.
- I learned and applied the basics of **project management**, including manpower and budget scheduling to the technical coordination for the **PIXSIC project** in 2008, and on **DESI** since 2015.
- I have set-up a debug and **characterization test bench in python** for the **CTA/NectarCam** Front End Electronics. I have then transformed it into an **automated acceptance test-bench** with a **GUI**, used in mass production.

### Languages

French	■	■	■	■	■	■
English	■	■	■	■	■	■
Russian	■	■	■	■	■	■
German	■	■	■	■	■	■
Spanish	■	■	■	■	■	■



### Personal skills and activities

